United States Department of Agriculture

Natural Resources Conservation Service

In cooperation with South Carolina Agricultural Experiment Station and South Carolina Department of Natural Resources

Soil Survey of Lee County, South Carolina

How To Use This Soil Survey

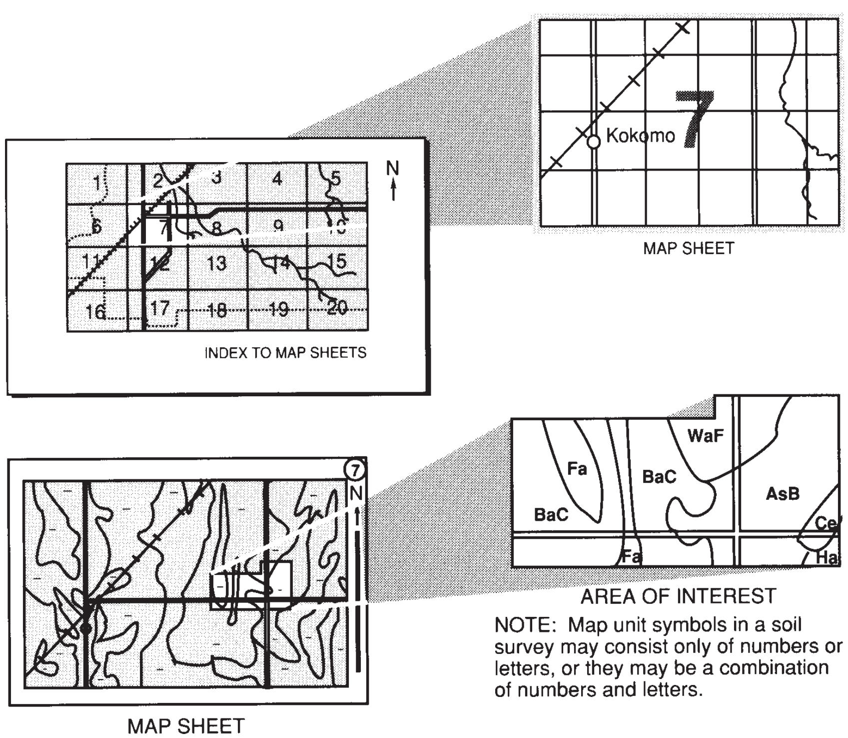
Detailed Soil Maps

The detailed soil maps can be useful in planning the use and management of small areas.

To find information about your area of interest, locate that area on the **Index to Map Sheets**. Note the number of the map sheet and turn to that sheet.

Locate your area of interest on the map sheet. Note the map unit symbols that are in that area. Turn to the **Contents**, which lists the map units by symbol and name and shows the page where each map unit is described.

The **Contents** shows which table has data on a specific land use for each detailed soil map unit. Also see the **Contents** for sections of this publication that may address your specific needs.



National Cooperative Soil Survey

This soil survey is a publication of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (formerly the Soil Conservation Service) has leadership for the Federal part of the National Cooperative Soil Survey. This survey was made cooperatively by the Natural Resources Conservation Service, the South Carolina Agricultural Experiment Station, and the South Carolina Department of Natural Resources. The survey is part of the technical assistance furnished to the Lee County Soil and Water Conservation District.

Major fieldwork for this soil survey was completed in 2003. Soil names and descriptions were approved in 2005. Unless otherwise indicated, statements in this publication refer to conditions in the survey area in 2005. The most current official data are available on the Internet at http://websoilsurvey.nrcs.usda.gov.

Soil maps in this survey may be copied without permission. Enlargement of these maps, however, could cause misunderstanding of the detail of mapping. If enlarged, maps do not show the small areas of contrasting soils that could have been shown at a larger scale.

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Cover Caption

Peanuts growing in an area of Norfolk loamy sand, 0 to 2 percent slopes. High yields of peanuts can be produced in areas of this soil under good management.

Additional information about the Nation's natural resources is available online from the Natural Resources Conservation Service at http://www.nrcs.usda.gov.

Contents

Issued 2007

Foreword

Soil surveys contain information that affects land use planning in survey areas. They include predictions of soil behavior for selected land uses. The surveys highlight soil limitations, improvements needed to overcome the limitations, and the impact of selected land uses on the environment.

Soil surveys are designed for many different users. Farmers, foresters, and agronomists can use the surveys to evaluate the potential of the soil and the management needed for maximum food and fiber production. Planners, community officials, engineers, developers, builders, and home buyers can use the surveys to plan land use, select sites for construction, and identify special practices needed to ensure proper performance. Conservationists, teachers, students, and specialists in recreation, wildlife management, waste disposal, and pollution control can use the surveys to help them understand, protect, and enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. The information in this report is intended to identify soil properties that are used in making various land use or land treatment decisions. Statements made in this report are intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

These and many other soil properties that affect land use are described in this soil survey. The location of each soil is shown on the detailed soil maps. Each soil in the survey area is described, and information on specific uses is given. Help in using this publication and additional information are available at the local office of the Natural Resources Conservation Service or the Cooperative Extension Service.

Walter W. Douglas
State Conservationist
Natural Resources Conservation Service

Soil Survey of
Lee County, South Carolina

By Charles M. Ogg, Natural Resources Conservation Service

Fieldwork by Charles M. Ogg, Charles A. Ferguson, Angela K. Major, and Edward H. Earles, Natural Resources Conservation Service

United States Department of Agriculture, Natural Resources Conservation Service, in cooperation with
South Carolina Agricultural Experiment Station and the South Carolina Department of Natural Resources

LEE COUNTY is in the northeastern part of South Carolina (fig. 1). It is about 50 miles east of the state capital, Columbia, about 40 miles south of the North Carolina state line, and about 80 miles from the Atlantic Ocean. The county is bounded on the north and the west by Kershaw County, on the west and the south by Sumter County, and on the east by Darlington County and Lynches River, which separates Lee County from Florence County. The elevation ranges from about 120 feet along Lynches River, southeast of Lynchburg, to about 430 feet near Spring Hill.

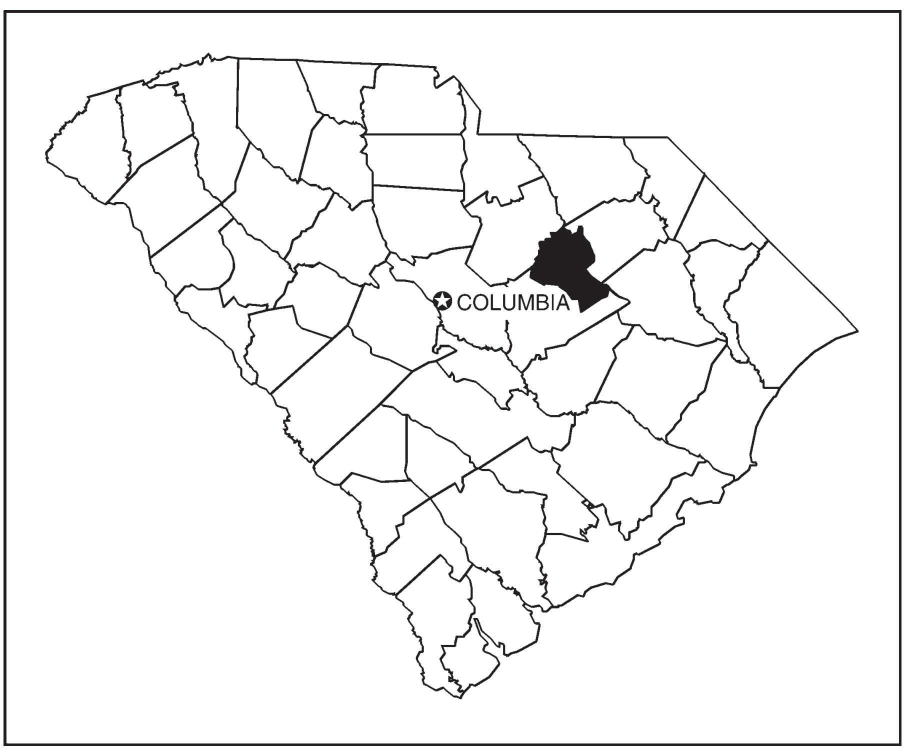

Figure 1.—Location of Lee County in South Carolina.

Lee County has a total land area of 263,000 acres, or 410 square miles. In 2000, the county had a population of about 20,100 (USDC, 2005). Bishopville, which is the county seat and is located in the central part of the county, had a population of about 3,700 (USDC, 2000).

This soil survey updates the Soil Survey of Lee County published in 1959. This survey provides updated maps and soil interpretations.

General Nature of the County

This section gives general information about Lee County. It describes the history and development and the climate.

History and Development

Native Americans were in South Carolina about 14,500 years before the first Europeans. Siouan peoples of the Woodland Horizon (circa 1000 B.C. to A.D. 1500) settled the region, which includes present-day Lee County, east of the Catawba and Wateree rivers and north of the Santee River. Agriculture was important for these ancestors of the Catawba tribe. They grew squash, corn, and other domesticated plants (Edgar, 1998).

The first European settlers in the survey area were British pioneers who moved into the backcountry from the Williamsburg Township in about 1740. They raised tobacco, wheat, hemp, indigo, corn, and other products. Other early settlers were French, Scotch, Irish, Welsh, and German. The first settlement, known as Radcliff's, was established on Lynches River in 1770. In 1790, William Singleton purchased land through which the stagecoach route between Georgetown and Charlotte passed. Singleton and his wife operated a tavern at the intersection of Mecklenburg Road and MaCallum Ferry Road. A new settlement at this intersection became known as Singleton's Crossroads. Dr. Jacques Bishop purchased this land in 1820, and in 1825 the name was changed to Bishopville (Lee County Bicentennial Commission, 1976).

Lee County originally was part of a vast territory named by the Lord's Proprietors as Craven County, St. Mark's Parish. The land was divided several times. It belonged to Claremont County in 1785 and Salem County in 1792. Salem County became part of Sumter County in 1800. Lee County was created in 1902 from portions of Darlington, Kershaw, and Sumter Counties. Bishopville was chosen as the county seat (Lee County Chamber of Commerce, 1992).

Most of the county is rural. Farming is a major economic enterprise. The climate and soils of the county are suited to diversified row-crop agriculture. Cotton (fig. 2), peanuts, soybeans, wheat, corn, and tobacco are major crops. The timber industry is also an important enterprise. Much formerly cultivated land now is used for timber production.

Climate

Prepared by the Natural Resources Conservation Service, National Water and Climate Center, Portland, Oregon.

Climate data are provided in the tables "Temperature and Precipitation," "Freeze Dates in Spring and Fall," and "Growing Season." The data were recorded at Bishopville in the period 1971 to 2000.

In winter, the average temperature is 44.7 degrees F and the average daily minimum temperature is 33.1 degrees. The lowest temperature on record, which occurred on January 21, 1985, is -2 degrees. In summer, the average temperature is 78.2 degrees and the average daily maximum temperature is 89.3 degrees. The highest recorded temperature, which occurred on August 22, 1983, is 106 degrees.

Figure 2.—Cotton awaiting harvest in an area of Noboco-Goldsboro complex, 0 to 2 percent slopes.

Growing degree days are shown in the table “Temperature and Precipitation.” They are equivalent to “heat units.” During the month, growing degree days accumulate by the amount that the average temperature each day exceeds a base temperature (50 degrees F). The normal monthly accumulation is used to schedule single or successive plantings of a crop between the last freeze in spring and the first freeze in fall.

The total annual precipitation is about 45.31 inches. Of this, 27.2 inches, or 60 percent, usually falls in April through September. The growing season for most crops falls within this period. The heaviest 1-day rainfall during the period of record was 7.10 inches on October 11, 1990. Thunderstorms occur on about 53 days each year, and most occur between May and August.

The average seasonal snowfall is about 1.7 inches. The greatest snow depth at any one time during the period of record was 11 inches, which occurred on February 11, 1973. On the average, 1 day of the year has at least 1 inch of snow on the ground. The number of such days varies greatly from year to year.

The average relative humidity in midafternoon is about 51 percent. Humidity is higher at night, and the average at dawn is about 87 percent. The sun shines 66 percent of the time possible in summer and 58 percent in winter. The prevailing wind is from the southwest. Average windspeed is highest, around 8 miles per hour, in March and April.

How This Survey Was Made

The update soil survey of Lee County, South Carolina, was conducted to insure that soils information provided for survey areas within Major Land Resource Area (MLRA) 133A (Southern Coastal Plain) and MLRA 137 (Carolina and Georgia Sand Hills) has common soil lines, modern interpretations, and up-to-date soil descriptions. This information meets the standards established and defined for the survey area in the

memorandum of understanding that was developed among cooperating agencies. Soil surveys that are consistent and uniform within a broad area enable the coordination of management recommendations and the uniform program application of soils information.

This survey was made to provide information about the soils and miscellaneous areas in the survey area. The information includes a description of the soils and miscellaneous areas and their location and a discussion of their suitability, limitations, and management for specified uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They dug many holes to study the soil profile, which is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

The soils and miscellaneous areas in the survey area are in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Map unit documentation in the updated Lee County Soil Survey consists primarily of information gathered from soil transects, which are conducted by soil scientists in order to sample specific soil types. A soil transect involves making soil borings at fixed, random, subjectively determined intervals. Soil scientists then record the characteristics of the soil profiles that they study. They note soil color; texture, size and shape of soil aggregates; kind and amount of rock fragments; distribution of plant roots; reaction; and other features that enable them to identify soils. This information can then be used to run statistical analyses for specific soil properties. The results of these analyses, along with other observations, enable the soil scientists to assign the soils to taxonomic classes (units).

Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are

modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

Aerial photographs used in this update survey were taken in 1989. Soil scientists studied U.S. Geological Survey topographic maps and orthophotographs to relate land and image features. Adjustments of soil boundary lines on the update soil maps were made to coincide with the U.S. Geological Survey topographic map contour lines and the tonal patterns on aerial photographs. Aerial photographs also show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

The descriptions, names, and delineations of the soils in this survey area do not fully agree with those of the soils in adjacent survey areas. Differences are the result of a better knowledge of soils, modifications in series concepts, or variations in the intensity of mapping or in the extent of the soils in the survey areas.

Detailed Soil Map Units

The map units delineated on the detailed soil maps in this survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions in this section, along with the maps, can be used to determine the suitability and potential of a unit for specific uses. They also can be used to plan the management needed for those uses.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. The contrasting components are mentioned in the map unit descriptions. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives the principal hazards and limitations to be considered in planning for specific uses.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown

on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Norfolk loamy sand, 2 to 6 percent slopes, is a phase of the Norfolk series.

Some map units are made up of two or more major soils. These map units are complexes. A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Ailey-Barnwell complex, 0 to 6 percent slopes, is an example.

This survey includes *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Udorthents, refuse substratum-Pits complex, 0 to 15 percent slopes, is an example.

The table “Acreage and Proportionate Extent of the Soils” lists the map units in this survey area. Other tables give properties of the soils and the limitations, capabilities, and potentials for many uses. The Glossary defines many of the terms used in describing the soils.

AaB—Ailey-Barnwell complex, 0 to 6 percent slopes

Setting

Major land resource area: Southern Coastal Plain and Carolina and Georgia Sand Hills
Landform: Marine terraces
Position on the landform: Summits, shoulders, and backslopes
Elevation: 230 to 348 feet

Map Unit Composition

Ailey and similar soils: Typically 64 percent; ranging from about 48 to 80 percent
Barnwell and similar soils: Typically 20 percent; ranging from about 6 to 34 percent

Typical Profile

Ailey
Surface layer:
0 to 8 inches—brown sand
Subsurface layer:
8 to 22 inches—very pale brown sand
Subsoil layer:
22 to 31 inches—reddish yellow sandy clay loam
31 to 42 inches—reddish yellow sandy clay loam; about 30 percent is firm and brittle
42 to 65 inches—yellow sandy loam
Substratum layer:
65 to 80 inches—very pale brown coarse sandy loam

Barnwell
Surface layer:
0 to 7 inches—dark brown loamy coarse sand
Subsurface layer:
7 to 11 inches—light yellowish brown loamy coarse sand
Subsoil layer:
11 to 36 inches—yellowish brown sandy clay loam; yellowish red masses of oxidized iron
36 to 44 inches—yellowish brown clay; red masses of oxidized iron
44 to 50 inches—yellowish brown clay; light gray iron depletions and yellowish red and strong brown masses of oxidized iron
50 to 56 inches—red sandy clay loam

Substratum layer:
56 to 80 inches—light red sandy clay loam; yellow iron depletions

Minor Components

- Pelion soils
- Vaucluse soils

Soil Properties and Qualities

Available water capacity: Ailey—very low (about 2.1 inches); Barnwell—moderate (about 7.2 inches)
Slowest saturated hydraulic conductivity: Ailey—moderately low (about 0.06 in/hr); Barnwell—moderately high (about 0.20 in/hr)
Drainage class: Well drained
Depth to seasonal high water table: Ailey—more than 6.0 feet; Barnwell—about 3.3 to 4.7 feet
Water table kind: Barnwell—perched
Flooding hazard: None
Ponding hazard: None
Shrink-swell potential: Low
Runoff class: Low
Parent material: Fluviomarine deposits

Use and Management Considerations

Cropland
Suitability: Ailey—not suited to corn, cotton lint, soybeans, or peanuts; Barnwell—moderately suited to corn, soybeans, and wheat and well suited to cotton lint (fig. 3) and peanuts
- The slope increases surface runoff, the hazard of erosion, and nutrient loss.

Figure 3.—Strip-till cotton in an area of Ailey-Barnwell complex, 0 to 6 percent slopes. Wheat stubble benefits strip-till cotton by conserving moisture and protecting against soil erosion.

- Sandy or coarse textured soil layers accelerate the rate at which plant nutrients are leached.
- Soil crusting decreases water infiltration and interferes with the emergence of seedlings.

Pasture
Suitability: Well suited to pasture
- The slope increases surface runoff, the hazard of erosion, and nutrient loss.

Woodland
Suitability: Well suited to loblolly pine
- Coarse textured soil layers increase the need for maintenance of haul roads and log landings.
- Coarse textured soil layers may slough, thus reducing the efficiency of mechanical planting equipment.
- The coarseness of the soil may reduce the traction of wheeled harvest equipment and log trucks.
- The stickiness of the soil reduces the efficiency of mechanical planting equipment.

Building sites
- The seasonal high water table of the Barnwell soil may restrict the period when excavations can be made.
- The high content of sand or gravel in the soil increases sloughing and causes cutbanks to be more susceptible to caving.
- The high content of clay in the subsurface layer of the Barnwell soil increases the difficulty of digging, filling, and compacting the soil material in shallow excavations.

Septic tank absorption fields
- The seasonal high water table of the Barnwell soil greatly limits the absorption and proper treatment of the effluent from conventional septic systems.
- The restricted permeability of these soils limits the absorption and proper treatment of the effluent from conventional septic systems.

Local roads and streets
- These soils are well suited to local roads and streets.

Interpretative Groups

Land capability class: Ailey—3s; Barnwell—2e
Hydric soil: No
Prime farmland: Not prime farmland

AcC—Ailey-Troup-Vaucluse complex, 6 to 10 percent slopes

Setting

Major land resource area: Southern Coastal Plain and Carolina and Georgia Sand Hills
Landform: Marine terraces
Position on the landform: Backslopes
Elevation: 200 to 361 feet

Map Unit Composition

Ailey and similar soils: Typically 48 percent; ranging from about 31 to 65 percent
Troup and similar soils: Typically 20 percent; ranging from about 6 to 34 percent
Vaucluse and similar soils: Typically 17 percent; ranging from about 3 to 29 percent

Typical Profile

Ailey
Surface layer:
0 to 8 inches—brown sand
Subsurface layer:
8 to 22 inches—very pale brown sand
Subsoil layer:
22 to 31 inches—reddish yellow sandy clay loam
31 to 42 inches—reddish yellow sandy clay loam; about 30 percent is firm and brittle
42 to 65 inches—yellow sandy loam
Substratum layer:
65 to 80 inches—very pale brown coarse sandy loam

Troup
Surface layer:
0 to 3 inches—dark grayish brown sand
Subsurface layer:
3 to 46 inches—very pale brown sand
Subsoil layer:
46 to 80 inches—strong brown sandy clay loam

Vaucluse
Surface layer:
0 to 2 inches—dark gray loamy sand
Subsurface layer:
2 to 6 inches—brownish yellow loamy sand
Subsoil layer:
6 to 16 inches—yellowish red sandy clay loam
16 to 25 inches—yellowish red sandy clay loam; common brownish yellow mottles
25 to 50 inches—red sandy clay loam
Substratum layer:
50 to 80 inches—reddish yellow loamy sand; common yellow mottles

Minor Components

- Barnwell soils
- Lucknow soils
- Johnston soils

Soil Properties and Qualities

Available water capacity: Ailey—very low (about 2.1 inches); Troup—low (about 4.0 inches); Vaucluse—very low (about 1.9 inches)
Slowest saturated hydraulic conductivity: Ailey—moderately low (about 0.06 in/hr); Troup—moderately high (about 0.57 in/hr); Vaucluse—low (about 0.002 in/hr)
Drainage class: Ailey and Vaucluse—well drained; Troup—somewhat excessively drained
Depth to seasonal high water table: More than 6.0 feet
Flooding hazard: None
Ponding hazard: None
Shrink-swell potential: Low
Runoff class: Ailey and Vaucluse—medium; Troup—low
Parent material: Fluviomarine deposits

Use and Management Considerations

Cropland
Suitability: Not suited to corn, cotton lint, soybeans, or peanuts
- The slope increases surface runoff, the hazard of erosion, and nutrient loss.

- The limited available water capacity may cause plants to suffer from moisture stress.
- Sandy or coarse textured soil layers accelerate the rate at which plant nutrients are leached.
- Soil crusting decreases water infiltration and interferes with the emergence of seedlings.

Pasture
Suitability: Well suited to pasture
- The slope increases surface runoff, the hazard of erosion, and nutrient loss.
- The limited available water capacity may cause plants to suffer from moisture stress during the drier summer months.

Woodland
Suitability: Well suited to loblolly pine
- Coarse textured soil layers increase the need for maintenance of haul roads and log landings.
- The slope creates unsafe operating conditions and reduces the operating efficiency of log trucks.
- The slope may restrict the use of some mechanical planting equipment.
- Coarse textured soil layers may slough, thus reducing the efficiency of mechanical planting equipment.
- The coarseness of the soil may reduce the traction of wheeled harvest equipment and log trucks.

Building sites
- The slope influences the use of machinery and the amount of excavation required.
- The high content of sand or gravel in the soil increases sloughing and causes cutbanks to be more susceptible to caving.
- The dense nature of the subsurface layer increases the difficulty of digging and compacting the soil material in shallow excavations.

Septic tank absorption fields
- The restricted permeability of these soils limits the absorption and proper treatment of the effluent from conventional septic systems.
- The slope limits the proper treatment of effluent from conventional septic systems.

Local roads and streets
- These soils are well suited to local roads and streets.

Interpretative Groups

Land capability class: Ailey and Troup—4s; Vaucluse—3e
Hydric soil: No
Prime farmland: Not prime farmland

AeD—Ailey-Vaucluse-Troup complex, 10 to 15 percent slopes

Setting

Major land resource area: Southern Coastal Plain and Carolina and Georgia Sand Hills
Landform: Marine terraces
Position on the landform: Backslopes
Elevation: 148 to 298 feet

Map Unit Composition

Ailey and similar soils: Typically 56 percent; ranging from about 36 to 76 percent
Vaucluse and similar soils: Typically 16 percent; ranging from about 1 to 31 percent
Troup and similar soils: Typically 12 percent; ranging from about 1 to 25 percent

Typical Profile

Ailey
Surface layer:
0 to 8 inches—brown sand
Subsurface layer:
8 to 22 inches—very pale brown sand
Subsoil layer:
22 to 31 inches—reddish yellow sandy clay loam
31 to 42 inches—reddish yellow sandy clay loam
42 to 65 inches—yellow sandy loam
Substratum layer:
65 to 80 inches—very pale brown coarse sandy loam

Vaucluse
Surface layer:
0 to 2 inches—dark gray loamy sand
Subsurface layer:
2 to 6 inches—brownish yellow loamy sand
Subsoil layer:
6 to 16 inches—yellowish red sandy clay loam
16 to 25 inches—yellowish red sandy clay loam; common brownish yellow mottles
25 to 50 inches—red sandy clay loam
Substratum layer:
50 to 80 inches—reddish yellow loamy sand; common yellow mottles

Troup
Surface layer:
0 to 3 inches—dark grayish brown sand
Subsurface layer:
3 to 46 inches—very pale brown sand
Subsoil layer:
46 to 80 inches—strong brown sandy clay loam

Minor Components

- Barnwell soils
- Johnston soils

Soil Properties and Qualities

Available water capacity: Ailey—very low (about 2.1 inches); Vaucluse—very low (about 1.9 inches); Troup—low (about 4.0 inches)
Slowest saturated hydraulic conductivity: Ailey—moderately low (about 0.06 in/hr); Vaucluse—low (about 0.002 in/hr); Troup—moderately high (about 0.57 in/hr)
Drainage class: Ailey and Vaucluse—well drained; Troup—somewhat excessively drained
Depth to seasonal high water table: More than 6.0 feet
Flooding hazard: None
Ponding hazard: None
Shrink-swell potential: Low

Runoff class: Ailey and Vaucluse—medium; Troup—low
Parent material: Fluviomarine deposits

Use and Management Considerations

Cropland
Suitability: Not suited to cropland

Pasture
Suitability: Not suited to pasture
- The slope increases surface runoff, the hazard of erosion, and nutrient loss.
- The limited available water capacity may cause plants to suffer from moisture stress during the drier summer months.

Woodland
Suitability: Well suited to loblolly pine
- Coarse textured soil layers increase the need for maintenance of haul roads and log landings.
- The slope creates unsafe operating conditions and reduces the operating efficiency of log trucks.
- The slope may restrict the use of some mechanical planting equipment.
- Coarse textured soil layers may slough, thus reducing the efficiency of mechanical planting equipment.
- The coarseness of the soil may reduce the traction of wheeled harvest equipment and log trucks.

Building sites
- The slope influences the use of machinery and the amount of excavation required.
- The high content of sand or gravel in the soil increases sloughing and causes cutbanks to be more susceptible to caving.
- The dense nature of the subsurface layer increases the difficulty of digging and compacting the soil material in shallow excavations.

Septic tank absorption fields
- The restricted permeability of these soils limits the absorption and proper treatment of the effluent from conventional septic systems.
- The slope limits the proper treatment of effluent from conventional septic systems.

Local roads and streets
- These soils are moderately suited to local roads and streets.

Interpretative Groups

Land capability class: Ailey and Troup—6s; Vaucluse—4e
Hydric soil: No
Prime farmland: Not prime farmland

AgB—Alaga sand, 0 to 4 percent slopes

Setting

Major land resource area: Southern Coastal Plain
Landform: Fluviomarine terraces
Position on the landform: Summits, shoulders, and backslopes
Elevation: 148 to 239 feet

Map Unit Composition

Alaga and similar soils: Typically 96 percent; ranging from about 90 to 100 percent

Typical Profile

Surface layer:
0 to 7 inches—brown sand
Substratum layer:
7 to 16 inches—yellowish brown sand
16 to 36 inches—strong brown loamy sand
36 to 80 inches—yellow sand; very pale brown iron depletions

Minor Components

- Foxworth soils

Soil Properties and Qualities

Available water capacity: Low (about 3.7 inches)
Slowest saturated hydraulic conductivity: High (about 5.95 in/hr)
Drainage class: Somewhat excessively drained
Depth to seasonal high water table: About 4.7 to 6.3 feet
Water table kind: Apparent
Flooding hazard: None
Ponding hazard: None
Shrink-swell potential: Low
Runoff class: Very low
Parent material: Eolian deposits

Use and Management Considerations

Cropland
Suitability: Not suited to corn or peanuts
- The limited available water capacity may cause plants to suffer from moisture stress.
- Sandy or coarse textured soil layers accelerate the rate at which plant nutrients are leached.
- Soil crusting decreases water infiltration and interferes with the emergence of seedlings.

Pasture
Suitability: Well suited to pasture
- The limited available water capacity may cause plants to suffer from moisture stress during the drier summer months.

Woodland
Suitability: Poorly suited to loblolly pine
- Coarse textured soil layers increase the need for maintenance of haul roads and log landings.
- Coarse textured soil layers may slough, thus reducing the efficiency of mechanical planting equipment.
- The coarseness of the soil may reduce the traction of wheeled harvest equipment and log trucks.

Building sites
- The seasonal high water table may restrict the period when excavations can be made.
- The high content of sand or gravel in the soil increases sloughing and causes cutbanks to be more susceptible to caving.

Septic tank absorption fields
- The excessive permeability of the soil limits the proper treatment of the effluent from conventional septic systems and may pollute the water table.

Local roads and streets

- This soil is well suited to local roads and streets.

Interpretative Groups

Land capability class: 3s
Hydric soil: No
Prime farmland: Not prime farmland

AoB—Alaga-Lucknow complex, 0 to 4 percent slopes, rarely flooded

Setting

Major land resource area: Southern Coastal Plain
Landform: Stream terraces
Position on the landform: Summits and shoulders
Elevation: 134 to 161 feet

Map Unit Composition

Alaga and similar soils: Typically 57 percent; ranging from about 41 to 72 percent
Lucknow and similar soils: Typically 28 percent; ranging from about 13 to 40 percent

Typical Profile

Alaga
Surface layer:
0 to 9 inches—brown sand
Substratum layer:
9 to 63 inches—yellowish brown loamy sand
63 to 80 inches—yellow coarse sand; very pale brown iron depletions

Lucknow
Surface layer:
0 to 8 inches—brown coarse sand
Subsurface layer:
8 to 48 inches—light yellowish brown sand
Subsoil layer:
48 to 80 inches—brownish yellow sandy clay loam; light gray iron depletions and yellowish red masses of oxidized iron

Minor Components

- Eunola soils
- Kalmia soils
- State soils

Soil Properties and Qualities

Available water capacity: Alaga—low (about 5.0 inches); Lucknow—low (about 3.6 inches)
Slowest saturated hydraulic conductivity: Alaga—high (about 5.95 in/hr); Lucknow—moderately high (about 0.20 in/hr)
Drainage class: Somewhat excessively drained
Depth to seasonal high water table: Alaga—about 3.4 to 6.3 feet; Lucknow—about 3.3 to 6.9 feet
Water table kind: Apparent
Flooding hazard: Rare

Ponding hazard: None
Shrink-swell potential: Low
Runoff class: Very low
Parent material: Alluvium

Use and Management Considerations

Cropland
Suitability: Not suited to corn or peanuts
- Sandy or coarse textured soil layers accelerate the rate at which plant nutrients are leached.
- Soil crusting decreases water infiltration and interferes with the emergence of seedlings.

Pasture
Suitability: Well suited to pasture

Woodland
Suitability: Poorly suited to loblolly pine
- Coarse textured soil layers increase the need for maintenance of haul roads and log landings.
- Coarse textured soil layers may slough, thus reducing the efficiency of mechanical planting equipment.
- The coarseness of the soil may reduce the traction of wheeled harvest equipment and log trucks.

Building sites
- Flooding makes these soils unsuited to building site development.

Septic tank absorption fields
- The seasonal high water table greatly limits the absorption and proper treatment of the effluent from conventional septic systems.
- The excessive permeability of these soils limits the proper treatment of the effluent from conventional septic systems and may pollute the water table.

Local roads and streets
- These soils are moderately suited to local roads and streets.

Interpretative Groups

Land capability class: 3s
Hydric soil: No
Prime farmland: Not prime farmland

ApB—Alpin sand, 0 to 6 percent slopes

Setting

Major land resource area: Carolina and Georgia Sand Hills
Landform: Sand sheets
Position on the landform: Summits, backslopes, and shoulders
Elevation: 184 to 351 feet

Map Unit Composition

Alpin and similar soils: Typically 82 percent; ranging from about 73 to 91 percent

Typical Profile

Surface layer:
0 to 10 inches—brown sand

Subsurface layer:
10 to 49 inches—strong brown sand
49 to 80 inches—yellowish brown and very pale brown sand

Minor Components

- Lucknow soils
- Candor soils
- Troup soils

Soil Properties and Qualities

Available water capacity: Very low (about 2.6 inches)
Slowest saturated hydraulic conductivity: High (about 1.98 in/hr)
Drainage class: Excessively drained
Depth to seasonal high water table: More than 6.0 feet
Flooding hazard: None
Ponding hazard: None
Shrink-swell potential: Low
Runoff class: Very low
Parent material: Eolian sands

Use and Management Considerations

Cropland
Suitability: Not suited to peanuts or tobacco
- The slope increases surface runoff, the hazard of erosion, and nutrient loss.
- The limited available water capacity may cause plants to suffer from moisture stress.
- Sandy or coarse textured soil layers accelerate the rate at which plant nutrients are leached.
- Soil crusting decreases water infiltration and interferes with the emergence of seedlings.

Pasture
Suitability: Well suited to pasture
- The slope increases surface runoff, the hazard of erosion, and nutrient loss.
- The limited available water capacity may cause plants to suffer from moisture stress during the drier summer months.

Woodland
Suitability: Moderately suited to loblolly pine
- Coarse textured soil layers increase the need for maintenance of haul roads and log landings.
- Coarse textured soil layers may slough, thus reducing the efficiency of mechanical planting equipment.
- The coarseness of the soil may reduce the traction of wheeled harvest equipment and log trucks.

Building sites
- The high content of sand or gravel in the soil increases sloughing and causes cutbanks to be more susceptible to caving.

Septic tank absorption fields
- The excessive permeability of the soil limits the proper treatment of the effluent from conventional septic systems and may pollute the water table.

Local roads and streets
- This soil is well suited to local roads and streets.

Interpretative Groups

Land capability class: 4s
Hydric soil: No
Prime farmland: Not prime farmland

ApD—Alpin sand, 6 to 15 percent slopes

Setting

Major land resource area: Carolina and Georgia Sand Hills
Landform: Sand sheets
Position on the landform: Backslopes and shoulders
Elevation: 184 to 380 feet

Map Unit Composition

Alpin and similar soils: Typically 90 percent; ranging from about 73 to 100 percent

Typical Profile

Surface layer:
0 to 10 inches—brown sand
Subsurface layer:
10 to 49 inches—strong brown sand
49 to 80 inches—yellowish brown and very pale brown sand

Minor Components

- Troup soils

Soil Properties and Qualities

Available water capacity: Very low (about 2.6 inches)
Slowest saturated hydraulic conductivity: High (about 1.98 in/hr)
Drainage class: Excessively drained
Depth to seasonal high water table: More than 6.0 feet
Flooding hazard: None
Ponding hazard: None
Shrink-swell potential: Low
Runoff class: Low
Parent material: Eolian sands

Use and Management Considerations

Cropland
Suitability: Not suited to cropland

Pasture
Suitability: Not suited to pasture

Woodland
Suitability: Moderately suited to loblolly pine
- Coarse textured soil layers increase the need for maintenance of haul roads and log landings.
- The slope creates unsafe operating conditions and reduces the operating efficiency of log trucks.
- The slope may restrict the use of some mechanical planting equipment.
- Coarse textured soil layers may slough, thus reducing the efficiency of mechanical planting equipment.

- The coarseness of the soil may reduce the traction of wheeled harvest equipment and log trucks.

Building sites
- The slope influences the use of machinery and the amount of excavation required.
- The high content of sand or gravel in the soil increases sloughing and causes cutbanks to be more susceptible to caving.

Septic tank absorption fields
- The slope limits the proper treatment of effluent from conventional septic systems.

Local roads and streets
- This soil is moderately suited to local roads and streets.

Interpretative Groups

Land capability class: 7s
Hydric soil: No
Prime farmland: Not prime farmland

AuB—Autryville sand, 0 to 4 percent slopes

Setting

Major land resource area: Southern Coastal Plain
Landform: Marine terraces
Position on the landform: Summits and shoulders
Elevation: 174 to 216 feet

Map Unit Composition

Autryville and similar soils: Typically 83 percent; ranging from about 72 to 93 percent

Typical Profile

Surface layer:
0 to 11 inches—olive brown sand
Subsurface layer:
11 to 21 inches—olive yellow sand
Subsoil layer:
21 to 31 inches—yellowish brown sandy loam
31 to 51 inches—brownish yellow loamy sand
51 to 80 inches—light brownish gray sandy clay loam; pale brown iron depletions and yellowish red masses of oxidized iron

Minor Components

- Lucknow soils
- Bonneau soils
- Wagram soils
- Norfolk soils

Soil Properties and Qualities

Available water capacity: Low (about 5.2 inches)
Slowest saturated hydraulic conductivity: Moderately high (about 0.57 in/hr)
Drainage class: Well drained
Depth to seasonal high water table: About 3.8 to 6.3 feet
Water table kind: Apparent

Flooding hazard: None
Ponding hazard: None
Shrink-swell potential: Low
Runoff class: Very low
Parent material: Fluviomarine deposits

Use and Management Considerations

Cropland
Suitability: Not suited to corn, cotton lint, soybeans, peanuts, or tobacco
- Sandy or coarse textured soil layers accelerate the rate at which plant nutrients are leached.
- Soil crusting decreases water infiltration and interferes with the emergence of seedlings.

Pasture
Suitability: Well suited to pasture

Woodland
Suitability: Poorly suited to loblolly pine, southern red oak, and sweetgum
- Coarse textured soil layers increase the need for maintenance of haul roads and log landings.
- Coarse textured soil layers may slough, thus reducing the efficiency of mechanical planting equipment.
- The coarseness of the soil may reduce the traction of wheeled harvest equipment and log trucks.

Building sites
- The seasonal high water table may restrict the period when excavations can be made.
- The high content of sand or gravel in the soil increases sloughing and causes cutbanks to be more susceptible to caving.

Septic tank absorption fields
- The seasonal high water table greatly limits the absorption and proper treatment of the effluent from conventional septic systems.
- The excessive permeability of the soil limits the proper treatment of the effluent from conventional septic systems and may pollute the water table.

Local roads and streets
- This soil is well suited to local roads and streets.

Interpretative Groups

Land capability class: 2s
Hydric soil: No
Prime farmland: Not prime farmland

BaB—Barnwell loamy coarse sand, 2 to 6 percent slopes

Setting

Major land resource area: Southern Coastal Plain
Landform: Marine terraces
Position on the landform: Summits, shoulders, and backslopes
Elevation: 151 to 341 feet

Map Unit Composition

Barnwell and similar soils: Typically 75 percent; ranging from about 66 to 85 percent

Typical Profile

Surface layer:
0 to 7 inches—dark brown loamy coarse sand
Subsurface layer:
7 to 11 inches—light yellowish brown loamy coarse sand
Subsoil layer:
11 to 36 inches—yellowish brown sandy clay loam; yellowish red masses of oxidized iron
36 to 44 inches—yellowish brown clay; red masses of oxidized iron
44 to 50 inches—yellowish brown clay; light gray iron depletions and yellowish red and strong brown masses of oxidized iron
50 to 56 inches—red sandy clay loam
Substratum layer:
56 to 80 inches—light red sandy clay loam; yellow iron depletions

Minor Components

- Ailey soils
- Cowarts soils
- Nankin soils
- Pelion soils

Soil Properties and Qualities

Available water capacity: Moderate (about 7.1 inches)
Slowest saturated hydraulic conductivity: Moderately high (about 0.20 in/hr)
Drainage class: Well drained
Depth to seasonal high water table: About 3.3 to 4.7 feet
Water table kind: Perched
Flooding hazard: None
Ponding hazard: None
Shrink-swell potential: Low
Runoff class: Low
Parent material: Fluviomarine deposits

Use and Management Considerations

Cropland
Suitability: Moderately suited to corn, soybeans, and wheat and well suited to cotton lint and peanuts
- The slope increases surface runoff, the hazard of erosion, and nutrient loss.
- Soil crusting decreases water infiltration and interferes with the emergence of seedlings.

Pasture
Suitability: Well suited to pasture
- The slope increases surface runoff, the hazard of erosion, and nutrient loss.

Woodland
Suitability: Poorly suited to loblolly pine
- Coarse textured soil layers increase the need for maintenance of haul roads and log landings.
- Coarse textured soil layers may slough, thus reducing the efficiency of mechanical planting equipment.

- The coarseness of the soil may reduce the traction of wheeled harvest equipment and log trucks.
- The stickiness of the soil reduces the efficiency of mechanical planting equipment.

Building sites
- The seasonal high water table may restrict the period when excavations can be made.
- The high content of clay in the subsurface layer increases the difficulty of digging, filling, and compacting the soil material in shallow excavations.

Septic tank absorption fields
- The seasonal high water table greatly limits the absorption and proper treatment of the effluent from conventional septic systems.
- The restricted permeability of the soil limits the absorption and proper treatment of the effluent from conventional septic systems.

Local roads and streets
- This soil is well suited to local roads and streets.

Interpretative Groups

Land capability class: 2e
Hydric soil: No
Prime farmland: Not prime farmland

BbB2—Barnwell sandy loam, 2 to 6 percent slopes, moderately eroded

Setting

Major land resource area: Southern Coastal Plain
Landform: Marine terraces
Position on the landform: Summits, shoulders, and backslopes
Elevation: 164 to 443 feet

Map Unit Composition

Barnwell and similar soils: Typically 85 percent; ranging from about 80 to 90 percent

Typical Profile

Surface layer:
0 to 7 inches—dark brown sandy loam
Subsoil layer:
7 to 36 inches—yellowish brown sandy clay loam; yellowish red masses of oxidized iron
36 to 44 inches—yellowish brown clay; red masses of oxidized iron
44 to 50 inches—yellowish brown clay; light gray iron depletions and yellowish red and strong brown masses of oxidized iron
50 to 56 inches—red sandy clay loam
Substratum layer:
56 to 80 inches—light red sandy clay loam; yellow iron depletions

Minor Components

- Dothan soils
- Nankin soils

Soil Properties and Qualities

Available water capacity: Moderate (about 7.9 inches)
Slowest saturated hydraulic conductivity: Moderately high (about 0.20 in/hr)
Drainage class: Well drained
Depth to seasonal high water table: About 3.3 to 4.7 feet
Water table kind: Perched
Flooding hazard: None
Ponding hazard: None
Shrink-swell potential: Low
Runoff class: Low
Parent material: Fluviomarine deposits

Use and Management Considerations

Cropland
Suitability: Moderately suited to corn, soybeans, and wheat and well suited to cotton lint and peanuts
- The slope increases surface runoff, the hazard of erosion, and nutrient loss.
- Erosion has removed part of the surface soil, and the remaining surface soil is less productive and more difficult to manage.
- Soil crusting decreases water infiltration and interferes with the emergence of seedlings.

Pasture
Suitability: Well suited to pasture
- The slope increases surface runoff, the hazard of erosion, and nutrient loss.

Woodland
Suitability: Poorly suited to loblolly pine
- Coarse textured soil layers increase the need for maintenance of haul roads and log landings.
- Coarse textured soil layers may slough, thus reducing the efficiency of mechanical planting equipment.
- The coarseness of the soil may reduce the traction of wheeled harvest equipment and log trucks.
- The stickiness of the soil reduces the efficiency of mechanical planting equipment.

Building sites
- The seasonal high water table may restrict the period when excavations can be made.
- The high content of clay in the subsurface layer increases the difficulty of digging, filling, and compacting the soil material in shallow excavations.

Septic tank absorption fields
- The seasonal high water table greatly limits the absorption and proper treatment of the effluent from conventional septic systems.
- The restricted permeability of the soil limits the absorption and proper treatment of the effluent from conventional septic systems.

Local roads and streets
- This soil is well suited to local roads and streets.

Interpretative Groups

Land capability class: 3e
Hydric soil: No
Prime farmland: Not prime farmland

BcC—Barnwell-Cowarts-Troup complex, 6 to 10 percent slopes

Setting

Major land resource area: Southern Coastal Plain
Landform: Marine terraces
Position on the landform: Backslopes and shoulders
Elevation: 151 to 341 feet

Map Unit Composition

Barnwell and similar soils: Typically 58 percent; ranging from about 39 to 73 percent
Cowarts and similar soils: Typically 17 percent; ranging from about 3 to 29 percent
Troup and similar soils: Typically 15 percent; ranging from about 2 to 28 percent

Typical Profile

Barnwell
Surface layer:
0 to 7 inches—dark brown loamy coarse sand
Subsurface layer:
7 to 11 inches—light yellowish brown loamy coarse sand
Subsoil layer:
11 to 36 inches—yellowish brown sandy clay loam; yellowish red masses of oxidized iron
36 to 44 inches—yellowish brown clay; red masses of oxidized iron
44 to 50 inches—yellowish brown clay; light gray iron depletions and yellowish red and strong brown masses of oxidized iron
50 to 56 inches—red sandy clay loam
Substratum layer:
56 to 80 inches—light red sandy clay loam; yellow iron depletions

Cowarts
Surface layer:
0 to 6 inches—grayish brown loamy sand
Subsoil layer:
6 to 29 inches—brownish yellow sandy clay loam
Substratum layer:
29 to 80 inches—yellowish red sandy loam

Troup
Surface layer:
0 to 3 inches—dark grayish brown sand
Subsurface layer:
3 to 46 inches—very pale brown sand
Subsoil layer:
46 to 80 inches—strong brown sandy clay loam

Minor Components

- Ailey soils

Soil Properties and Qualities

Available water capacity: Barnwell—moderate (about 7.2 inches); Cowarts and Troup—low (about 4.0 inches)
Slowest saturated hydraulic conductivity: Barnwell—moderately high (about 0.20 in/hr); Cowarts—low (about 0.002 in/hr); Troup—moderately high (about 0.57 in/hr)

Drainage class: Barnwell and Cowarts—well drained; Troup—somewhat excessively drained
Depth to seasonal high water table: Barnwell—about 3.3 to 4.7 feet; Cowarts and Troup—more than 6.0 feet
Water table kind: Barnwell—perched
Flooding hazard: None
Ponding hazard: None
Shrink-swell potential: Low
Runoff class: Barnwell and Cowarts—medium; Troup—low
Parent material: Fluviomarine deposits

Use and Management Considerations

Cropland
Suitability: Moderately suited to corn and soybeans and well suited to cotton lint
- The slope increases surface runoff, the hazard of erosion, and nutrient loss.
- Soil crusting decreases water infiltration and interferes with the emergence of seedlings.

Pasture
Suitability: Well suited to pasture
- The slope increases surface runoff, the hazard of erosion, and nutrient loss.

Woodland
Suitability: Poorly suited to loblolly pine
- The slope creates unsafe operating conditions and reduces the operating efficiency of log trucks.
- The slope may restrict the use of some mechanical planting equipment.
- Coarse textured soil layers may slough, thus reducing the efficiency of mechanical planting equipment.
- The coarseness of the soil may reduce the traction of wheeled harvest equipment and log trucks.
- The stickiness of the Barnwell soil reduces the efficiency of mechanical planting equipment.

Building sites
- The seasonal high water table may restrict the period when excavations can be made.
- The slope influences the use of machinery and the amount of excavation required.
- The high content of sand or gravel in the soil increases sloughing and causes cutbanks to be more susceptible to caving.
- The high content of clay in the subsurface layer increases the difficulty of digging, filling, and compacting the soil material in shallow excavations.

Septic tank absorption fields
- The seasonal high water table greatly limits the absorption and proper treatment of the effluent from conventional septic systems.
- The restricted permeability of these soils limits the absorption and proper treatment of the effluent from conventional septic systems.
- The slope limits the proper treatment of effluent from conventional septic systems.

Local roads and streets
- These soils are well suited to local roads and streets.

Interpretative Groups

Land capability class: Barnwell—3e; Cowarts—4e; Troup—4s
Hydric soil: No
Prime farmland: Not prime farmland

BoB—Bonneau sand, 0 to 6 percent slopes

Setting

Major land resource area: Southern Coastal Plain
Landform: Marine terraces
Position on the landform: Summits and shoulders
Elevation: 164 to 230 feet

Map Unit Composition

Bonneau and similar soils: Typically 86 percent; ranging from about 74 to 99 percent

Typical Profile

Surface layer:
0 to 8 inches—dark grayish brown sand
Subsurface layer:
8 to 24 inches—light yellowish brown sand
Subsoil layer:
24 to 51 inches—yellowish brown sandy clay loam
51 to 80 inches—yellowish brown sandy clay loam; light gray iron depletions and yellowish red masses of oxidized iron

Minor Components

- Lucknow soils
- Foxworth soils

Soil Properties and Qualities

Available water capacity: Moderate (about 6.1 inches)
Slowest saturated hydraulic conductivity: Moderately high (about 0.57 in/hr)
Drainage class: Well drained
Depth to seasonal high water table: About 3.3 to 4.8 feet
Water table kind: Apparent
Flooding hazard: None
Ponding hazard: None
Shrink-swell potential: Low
Runoff class: Low
Parent material: Fluviomarine deposits

Use and Management Considerations

Cropland
Suitability: Not suited to corn, cotton lint, soybeans, peanuts, or tobacco
- Sandy or coarse textured soil layers accelerate the rate at which plant nutrients are leached.
- Soil crusting decreases water infiltration and interferes with the emergence of seedlings.

Pasture
Suitability: Well suited to pasture

Woodland
Suitability: Well suited to loblolly pine
- Coarse textured soil layers increase the need for maintenance of haul roads and log landings.
- Coarse textured soil layers may slough, thus reducing the efficiency of mechanical planting equipment.

- The coarseness of the soil may reduce the traction of wheeled harvest equipment and log trucks.

Building sites
- The seasonal high water table may restrict the period when excavations can be made.
- The high content of sand or gravel in the soil increases sloughing and causes cutbanks to be more susceptible to caving.

Septic tank absorption fields
- The seasonal high water table greatly limits the absorption and proper treatment of the effluent from conventional septic systems.
- The excessive permeability limits the proper treatment of the effluent from conventional septic systems and may pollute the water table.

Local roads and streets
- This soil is well suited to local roads and streets.

Interpretative Groups

Land capability class: 2s
Hydric soil: No
Prime farmland: Not prime farmland

BuA—Butters coarse sand, 0 to 2 percent slopes

Setting

Major land resource area: Southern Coastal Plain
Landform: Marine terraces
Position on the landform: Summits
Elevation: 141 to 216 feet

Map Unit Composition

Butters and similar soils: Typically 85 percent; ranging from about 76 to 95 percent

Typical Profile

Surface layer:
0 to 9 inches—olive brown coarse sand
Subsurface layer:
9 to 12 inches—light yellowish brown loamy sand
Subsoil layer:
12 to 30 inches—yellowish brown sandy loam
30 to 49 inches—olive yellow loamy sand
49 to 55 inches—brownish yellow sandy clay loam; strong brown masses of oxidized iron
55 to 80 inches—yellowish brown sandy clay loam; gray iron depletions and yellowish red masses of oxidized iron

Minor Components

- Lucknow soils
- Alaga soils
- Norfolk soils

Soil Properties and Qualities

Available water capacity: Moderate (about 6.0 inches)
Slowest saturated hydraulic conductivity: Moderately high (about 0.57 in/hr)

Drainage class: Well drained
Depth to seasonal high water table: About 3.8 to 5.8 feet
Water table kind: Apparent
Flooding hazard: None
Ponding hazard: None
Shrink-swell potential: Low
Runoff class: Very low
Parent material: Fluviomarine deposits

Use and Management Considerations

Cropland
Suitability: Not suited to corn, soybeans, peanuts, wheat, or tobacco
- Soil crusting decreases water infiltration and interferes with the emergence of seedlings.

Pasture
Suitability: Well suited to pasture

Woodland
Suitability: Poorly suited to loblolly pine, southern red oak, and sweetgum
- Coarse textured soil layers increase the need for maintenance of haul roads and log landings.
- Coarse textured soil layers may slough, thus reducing the efficiency of mechanical planting equipment.
- The coarseness of the soil may reduce the traction of wheeled harvest equipment and log trucks.

Building sites
- The seasonal high water table may restrict the period when excavations can be made.
- The high content of sand or gravel in the soil increases sloughing and causes cutbanks to be more susceptible to caving.

Septic tank absorption fields
- The seasonal high water table greatly limits the absorption and proper treatment of the effluent from conventional septic systems.
- The excessive permeability of the soil limits the proper treatment of the effluent from conventional septic systems and may pollute the water table.

Local roads and streets
- This soil is well suited to local roads and streets.

Interpretative Groups

Land capability class: 2s
Hydric soil: No
Prime farmland: Not prime farmland

CaB—Candor sand, 0 to 6 percent slopes

Setting

Major land resource area: Carolina and Georgia Sand Hills
Landform: Sand sheets
Position on the landform: Summits and shoulders
Elevation: 180 to 344 feet

Map Unit Composition

Candor and similar soils: Typically 82 percent; ranging from about 73 to 90 percent

Typical Profile

Surface layer:
0 to 8 inches—brown sand
Subsurface layer:
8 to 25 inches—very pale brown coarse sand
Subsoil layer:
25 to 36 inches—yellowish brown loamy sand
36 to 61 inches—brownish yellow coarse sand
61 to 80 inches—brownish yellow sandy clay loam; yellowish red masses of oxidized iron

Minor Components

- Lucknow soils
- Wagram soils
- Fuquay soils
- Alpin soils

Soil Properties and Qualities

Available water capacity: Low (about 3.0 inches)
Slowest saturated hydraulic conductivity: Moderately high (about 0.57 in/hr)
Drainage class: Somewhat excessively drained
Depth to seasonal high water table: More than 6.0 feet
Flooding hazard: None
Ponding hazard: None
Shrink-swell potential: Low
Runoff class: Very low
Parent material: Eolian sands

Use and Management Considerations

Cropland
Suitability: Not suited to corn, soybeans, or tobacco
- The limited available water capacity may cause plants to suffer from moisture stress.
- Sandy or coarse textured soil layers accelerate the rate at which plant nutrients are leached.
- Soil crusting decreases water infiltration and interferes with the emergence of seedlings.

Pasture
Suitability: Well suited to pasture
- The limited available water capacity may cause plants to suffer from moisture stress during the drier summer months.

Woodland
Suitability: Poorly suited to loblolly pine
- Coarse textured soil layers increase the need for maintenance of haul roads and log landings.
- Coarse textured soil layers may slough, thus reducing the efficiency of mechanical planting equipment.
- The coarseness of the soil may reduce the traction of wheeled harvest equipment and log trucks.

Building sites
- The high content of sand or gravel in the soil increases sloughing and causes cutbanks to be more susceptible to caving.

Septic tank absorption fields
- The excessive permeability of the soil limits the proper treatment of the effluent from conventional septic systems and may pollute the water table.

Local roads and streets
- This soil is well suited to local roads and streets.

Interpretative Groups

Land capability class: 3s
Hydric soil: No
Prime farmland: Not prime farmland

CcA—Chastain-Chewacla complex, 0 to 2 percent slopes, frequently flooded

Setting

Major land resource area: Southern Coastal Plain
Landform: Flood plains
Position on the landform: Chastain—depressions; Chewacla—treads
Elevation: 115 to 194 feet

Map Unit Composition

Chastain and similar soils: Typically 72 percent; ranging from about 61 to 83 percent
Chewacla and similar soils: Typically 28 percent; ranging from about 17 to 39 percent

Typical Profile

Chastain
Surface layer:
0 to 4 inches—very dark grayish brown loam
Subsoil layer:
4 to 56 inches—gray clay; strong brown and olive yellow masses of oxidized iron
Substratum layer:
56 to 80 inches—gray sand

Chewacla
Surface layer:
0 to 1 inches—brown loam
Subsoil layer:
1 to 38 inches—yellowish brown loam; light brownish gray and light olive brown iron depletions and dark brown masses of oxidized iron
38 to 62 inches—gray sandy clay loam; brownish yellow and reddish yellow masses of oxidized iron
Substratum layer:
62 to 80 inches—gray sand

Soil Properties and Qualities

Chastain
Available water capacity: Chastain—moderate (about 7.1 inches); Chewacla—high (about 9.9 inches)

Slowest saturated hydraulic conductivity: Chastain—moderately low (about 0.06 in/hr); Chewacla—moderately high (about 0.57 in/hr)
Drainage class: Chastain—poorly drained; Chewacla—somewhat poorly drained
Depth to seasonal high water table: Chastain—at the surface; Chewacla—about 0.5 to 2.0 feet
Water table kind: Apparent
Flooding hazard: Frequent
Ponding hazard: None
Shrink-swell potential: Low
Runoff class: Chastain—very high; Chewacla—low
Parent material: Alluvium

Use and Management Considerations

Cropland
Suitability: Not suited to cropland

Pasture
Suitability: Not suited to pasture

Woodland
Suitability: Moderately suited to sweetgum and poorly suited to baldcypress
- Flooding may result in damage to haul roads.
- The low soil strength interferes with the construction of haul roads and log landings.
- Flooding restricts the safe use of roads by log trucks.
- Soil wetness may limit the use of these soils by log trucks.
- The low soil strength may create unsafe conditions for log trucks.
- The stickiness of the soil reduces the efficiency of mechanical planting equipment.

Building sites
- Flooding makes these soils unsuited to building site development.

Septic tank absorption fields
- Flooding makes these soils unsuited to septic tank absorption fields.
- The seasonal high water table makes these soils unsuited to conventional septic tank absorption fields.

Local roads and streets
- These soils are not suited to local roads and streets.
- Flooding may damage local roads and streets.
- The seasonal high water table affects the ease of excavation and grading and reduces the bearing capacity of these soils.
- The low soil strength is unfavorable for supporting heavy loads.

Interpretative Groups

Land capability class: Chastain—7w; Chewacla—4w
Hydric soil: Chastain—yes; Chewacla—no
Prime farmland: Not prime farmland

ChA—Chewacla-Chastain complex, 0 to 2 percent slopes, frequently flooded

Setting

Major land resource area: Southern Coastal Plain
Landform: Flood plains

Position on the landform: Chewacla—treads; Chastain—depressions
Elevation: 115 to 194 feet

Map Unit Composition

Chewacla and similar soils: Typically 79 percent; ranging from about 65 to 92 percent
Chastain and similar soils: Typically 21 percent; ranging from about 8 to 35 percent

Typical Profile

Chewacla
Surface layer:
0 to 1 inches—brown loam
Subsoil layer:
1 to 38 inches—yellowish brown loam; light brownish gray and light olive brown iron depletions and dark brown masses of oxidized iron
38 to 62 inches—gray sandy clay loam; brownish yellow and reddish yellow masses of oxidized iron
Substratum layer:
62 to 80 inches—gray sand

Chastain
Surface layer:
0 to 4 inches—very dark grayish brown loam
Subsoil layer:
4 to 56 inches—gray clay; strong brown and olive yellow masses of oxidized iron
Substratum layer:
56 to 80 inches—gray sand

Soil Properties and Qualities

Available water capacity: Chewacla—high (about 9.9 inches); Chastain—moderate (about 7.1 inches)
Slowest saturated hydraulic conductivity: Chewacla—moderately high (about 0.57 in/hr); Chastain—moderately low (about 0.06 in/hr)
Drainage class: Chewacla—somewhat poorly drained; Chastain—poorly drained
Depth to seasonal high water table: Chewacla—about 0.5 to 2.0 feet; Chastain—at the surface
Water table kind: Apparent
Flooding hazard: Frequent
Ponding hazard: None
Shrink-swell potential: Low
Runoff class: Chewacla—low; Chastain—very high
Parent material: Alluvium

Use and Management Considerations

Cropland
Suitability: Moderately suited to corn, soybeans, peanuts, and wheat and well suited to cotton lint and tobacco
- The high clay content restricts the rooting depth of crops.
- Frequent flooding restricts the use of winter grain crops.
- Flooding may damage crops.
- The seasonal high water table restricts equipment operation, decreases the viability of crops, and interferes with the planting and harvesting of crops.

Pasture
Suitability: Not suited to pasture
- Flooding may damage pastures.

- The seasonal high water table can affect equipment use, grazing patterns, and the viability of grass and legume species.

Woodland

Suitability: Well suited to loblolly pine, poorly suited to southern red oak, and moderately suited to yellow-poplar and sweetgum

- Flooding may result in damage to haul roads.
- The low soil strength interferes with the construction of haul roads and log landings.
- Flooding restricts the safe use of roads by log trucks.
- Soil wetness may limit the use of these soils by log trucks.
- The stickiness of the soil reduces the efficiency of mechanical planting equipment.

Building sites

- Flooding makes these soils unsuited to building site development.

Septic tank absorption fields

- Flooding makes these soils unsuited to septic tank absorption fields.

Local roads and streets

- These soils are not suited to local roads and streets.
- Flooding may damage local roads and streets.
- The seasonal high water table affects the ease of excavation and grading and reduces the bearing capacity of these soils.
- The low soil strength may cause structural damage to local roads and streets.

Interpretative Groups

Land capability class: Chewacla—4w; Chastain—7w
Hydric soil: Chewacla—no; Chastain—yes
Prime farmland: Not prime farmland

CwD—Cowarts loamy sand, 10 to 15 percent slopes

Setting

Major land resource area: Southern Coastal Plain and Carolina and Georgia Sand Hills
Landform: Marine terraces
Position on the landform: Backslopes and shoulders
Elevation: 230 to 403 feet

Map Unit Composition

Cowarts and similar soils: Typically 78 percent; ranging from about 70 to 87 percent

Typical Profile

Surface layer:
0 to 6 inches—grayish brown loamy sand
Subsoil layer:
6 to 29 inches—brownish yellow sandy clay loam
Substratum layer:
29 to 80 inches—yellowish red sandy loam

Minor Components

- Ailey soils
- Pelion soils

- Troup soils
- Johnston soils

Soil Properties and Qualities

Available water capacity: Low (about 4.0 inches)
Slowest saturated hydraulic conductivity: Low (about 0.002 in/hr)
Drainage class: Well drained
Depth to seasonal high water table: More than 6.0 feet
Flooding hazard: None
Ponding hazard: None
Shrink-swell potential: Low
Runoff class: Medium
Parent material: Fluviomarine deposits

Use and Management Considerations

Cropland
Suitability: Not suited to cropland
- The slope increases surface runoff, the hazard of erosion, and nutrient loss.
- The limited available water capacity may cause plants to suffer from moisture stress.
- Soil crusting decreases water infiltration and interferes with the emergence of seedlings.

Pasture
Suitability: Not suited to pasture
- The slope increases surface runoff, the hazard of erosion, and nutrient loss.
- The limited available water capacity may cause plants to suffer from moisture stress during the drier summer months.

Woodland
Suitability: Poorly suited to loblolly pine
- Coarse textured soil layers increase the need for maintenance of haul roads and log landings.
- The slope creates unsafe operating conditions and reduces the operating efficiency of log trucks.
- The slope may restrict the use of some mechanical planting equipment.
- Coarse textured soil layers may slough, thus reducing the efficiency of mechanical planting equipment.
- The coarseness of the soil may reduce the traction of wheeled harvest equipment and log trucks.

Building sites
- The slope influences the use of machinery and the amount of excavation required.

Septic tank absorption fields
- The restricted permeability of the soil limits the absorption and proper treatment of the effluent from conventional septic systems.
- The slope limits the proper treatment of effluent from conventional septic systems.

Local roads and streets
- This soil is moderately suited to local roads and streets.
- The slope makes it difficult to design local roads and streets.

Interpretative Groups

Land capability class: 4e
Hydric soil: No
Prime farmland: Not prime farmland

CxA—Coxville sandy loam, 0 to 2 percent slopes

Setting

Major land resource area: Southern Coastal Plain
Landform: Carolina Bays and gum ponds
Position on the landform: Depressions
Elevation: 131 to 312 feet

Map Unit Composition

Coxville and similar soils: Typically 96 percent; ranging from about 90 to 100 percent

Typical Profile

Surface layer:
0 to 7 inches—very dark gray sandy loam
Subsoil layer:
7 to 80 inches—gray sandy clay; reddish yellow, red, and brownish yellow masses of oxidized iron

Minor Components

- Rains soils

Soil Properties and Qualities

Available water capacity: Moderate (about 7.8 inches)
Slowest saturated hydraulic conductivity: Moderately high (about 0.20 in/hr)
Drainage class: Poorly drained
Depth to seasonal high water table: About 0.3 to 0.8 foot
Water table kind: Apparent
Flooding hazard: None
Ponding hazard: None
Shrink-swell potential: Low
Runoff class: Low
Parent material: Fluviomarine deposits

Use and Management Considerations

Cropland
Suitability: Moderately suited to corn and wheat and well suited to soybeans
- The high clay content restricts the rooting depth of crops.
- The seasonal high water table restricts equipment operation, decreases the viability of crops, and interferes with the planting and harvesting of crops.

Pasture
Suitability: Well suited to pasture
- The seasonal high water table can affect equipment use, grazing patterns, and the viability of grass and legume species.

Woodland
Suitability: Well suited to loblolly pine and moderately suited to yellow-poplar and sweetgum
- The soil is well suited to roads and landings.
- Soil wetness may limit the use of the soil by log trucks.
- The stickiness of the soil reduces the efficiency of mechanical planting equipment.
- The stickiness of the soil restricts the use of equipment for site preparation to drier periods.

Building sites
- The seasonal high water table may restrict the period when excavations can be made.

Septic tank absorption fields
- The seasonal high water table greatly limits the absorption and proper treatment of the effluent from conventional septic systems.
- The restricted permeability of the soil limits the absorption and proper treatment of the effluent from conventional septic systems.

Local roads and streets
- This soil is not suited to local roads and streets.
- The seasonal high water table affects the ease of excavation and grading and reduces the bearing capacity of the soil.
- The low soil strength is unfavorable for supporting heavy loads.

Interpretative Groups

Land capability class: 3w
Hydric soil: Yes
Prime farmland: Not prime farmland

DaA—Dorovan silty clay loam, overwash, 0 to 2 percent slopes, frequently flooded

Setting

Major land resource area: Southern Coastal Plain
Landform: Swamps
Position on the landform: Flood plains
Elevation: 180 to 190 feet

Map Unit Composition

Dorovan and similar soils: Typically 85 percent; ranging from about 71 to 99 percent

Typical Profile

Surface layer:
0 to 10 inches—grayish brown silty clay loam
Organic layer:
10 to 70 inches—black muck
Substratum layer:
70 to 80 inches—light brownish gray coarse sand

Minor Components

- Johnston soils

Soil Properties and Qualities

Available water capacity: Very high (about 22.1 inches)
Slowest saturated hydraulic conductivity: Moderately high (about 0.57 in/hr)
Drainage class: Very poorly drained
Depth to seasonal high water table: At the surface
Water table kind: Apparent
Flooding hazard: Frequent
Ponding hazard: None
Shrink-swell potential: Low

Runoff class: Very high
Parent material: Mucky organic material

Use and Management Considerations

Cropland
Suitability: Not suited to cropland
- Excessive permeability of the soil increases the risk of groundwater contamination.

Pasture
Suitability: Not suited to pasture

Woodland
Suitability: Poorly suited to baldcypress
- Flooding may result in damage to haul roads.
- The low soil strength interferes with the construction of haul roads and log landings.
- Flooding restricts the safe use of roads by log trucks.
- Soil wetness may limit the use of the soil by log trucks.
- The low soil strength may create unsafe conditions for log trucks.
- The stickiness of the soil reduces the efficiency of mechanical planting equipment.

Building sites
- Flooding makes the soil unsuited to building site development.
- Subsidence makes the soil unsuited to building site development.

Septic tank absorption fields
- Flooding makes the soil unsuited to septic tank absorption fields.
- The seasonal high water table makes the soil unsuited to conventional septic tank absorption fields.

Local roads and streets
- This soil is not suited to local roads and streets.
- Flooding may damage local roads and streets.
- The seasonal high water table affects the ease of excavation and grading and reduces the bearing capacity of the soil.
- Subsidence of the organic material reduces the bearing capacity of the soil.

Interpretative Groups

Land capability class: 7w
Hydric soil: Yes
Prime farmland: Not prime farmland

DoA—Dothan loamy sand, 0 to 2 percent slopes

Setting

Major land resource area: Southern Coastal Plain
Landform: Marine terraces
Position on the landform: Shoulders and summits
Elevation: 213 to 321 feet

Map Unit Composition

Dothan and similar soils: Typically 80 percent; ranging from about 66 to 94 percent

Typical Profile

Surface layer:
0 to 8 inches—brown loamy sand

Subsurface layer:
8 to 12 inches—light yellowish brown loamy sand
Subsoil layer:
12 to 37 inches—yellowish brown sandy clay loam; yellowish red masses of oxidized iron
37 to 80 inches—yellowish brown sandy clay loam; light yellowish brown and light gray iron depletions and plinthite nodules and red masses of oxidized iron

Minor Components

- Fuquay soils
- Norfolk soils
- Goldsboro soils

Soil Properties and Qualities

Available water capacity: Low (about 4.9 inches)
Slowest saturated hydraulic conductivity: Moderately high (about 0.20 in/hr)
Drainage class: Well drained
Depth to seasonal high water table: About 3.3 to 4.9 feet
Water table kind: Perched
Flooding hazard: None
Ponding hazard: None
Shrink-swell potential: Low
Runoff class: Low
Parent material: Fluviomarine deposits

Use and Management Considerations

Cropland
Suitability: Moderately suited to corn, soybeans, and wheat and well suited to cotton lint, peanuts, and tobacco
- Soil crusting decreases water infiltration and interferes with the emergence of seedlings.

Pasture
Suitability: Well suited to pasture

Woodland
Suitability: Poorly suited to loblolly pine
- Coarse textured soil layers increase the need for maintenance of haul roads and log landings.
- Coarse textured soil layers may slough, thus reducing the efficiency of mechanical planting equipment.
- The coarseness of the soil may reduce the traction of wheeled harvest equipment and log trucks.

Building sites
- The seasonal high water table may restrict the period when excavations can be made.

Septic tank absorption fields
- The seasonal high water table greatly limits the absorption and proper treatment of the effluent from conventional septic systems.
- The restricted permeability of the soil limits the absorption and proper treatment of the effluent from conventional septic systems.

Local roads and streets
- This soil is well suited to local roads and streets.

Interpretative Groups

Land capability class: 1
Hydric soil: No
Prime farmland: Prime farmland in all areas

DoB—Dothan loamy sand, 2 to 6 percent slopes

Setting

Major land resource area: Southern Coastal Plain
Landform: Marine terraces
Position on the landform: Shoulders, summits, and backslopes
Elevation: 243 to 351 feet

Map Unit Composition

Dothan and similar soils: Typically 80 percent; ranging from about 69 to 91 percent

Typical Profile

Surface layer:
0 to 8 inches—brown loamy sand
Subsurface layer:
8 to 12 inches—light yellowish brown loamy sand
Subsoil layer:
12 to 37 inches—yellowish brown sandy clay loam; yellowish red masses of oxidized iron
37 to 80 inches—yellowish brown sandy clay loam; light yellowish brown and light gray iron depletions and plinthite nodules and red masses of oxidized iron

Minor Components

- Barnwell soils
- Norfolk soils
- Thursa soils

Soil Properties and Qualities

Available water capacity: Low (about 4.8 inches)
Slowest saturated hydraulic conductivity: Moderately high (about 0.20 in/hr)
Drainage class: Well drained
Depth to seasonal high water table: About 3.3 to 5.5 feet
Water table kind: Perched
Flooding hazard: None
Ponding hazard: None
Shrink-swell potential: Low
Runoff class: Low
Parent material: Fluviomarine deposits

Use and Management Considerations

Cropland
Suitability: Moderately suited to corn, soybeans, and wheat and well suited to cotton lint, peanuts, and tobacco
- The slope increases surface runoff, the hazard of erosion, and nutrient loss.
- Soil crusting decreases water infiltration and interferes with the emergence of seedlings.

Pasture
Suitability: Well suited to pasture
- The slope increases surface runoff, the hazard of erosion, and nutrient loss.

Woodland
Suitability: Poorly suited to loblolly pine
- Coarse textured soil layers increase the need for maintenance of haul roads and log landings.
- Coarse textured soil layers may slough, thus reducing the efficiency of mechanical planting equipment.
- The coarseness of the soil may reduce the traction of wheeled harvest equipment and log trucks.

Building sites
- The seasonal high water table may restrict the period when excavations can be made.

Septic tank absorption fields
- The seasonal high water table greatly limits the absorption and proper treatment of the effluent from conventional septic systems.
- The restricted permeability of the soil limits the absorption and proper treatment of the effluent from conventional septic systems.

Local roads and streets
- This soil is well suited to local roads and streets.

Interpretative Groups

Land capability class: 2e
Hydric soil: No
Prime farmland: Prime farmland in all areas

DtB2—Dothan sandy loam, 2 to 6 percent slopes, moderately eroded

Setting

Major land resource area: Southern Coastal Plain
Landform: Marine terraces
Position on the landform: Shoulders, summits, and backslopes
Elevation: 243 to 351 feet

Map Unit Composition

Dothan and similar soils: Typically 80 percent; ranging from about 60 to 100 percent

Typical Profile

Surface layer:
0 to 6 inches—yellowish brown sandy loam
Subsoil layer:
6 to 37 inches—yellowish brown sandy clay loam; yellowish red masses of oxidized iron
37 to 80 inches—yellowish brown sandy clay loam; light yellowish brown and light gray iron depletions and plinthite nodules and red masses of oxidized iron

Minor Components

- Barnwell soils
- Nankin soils

Soil Properties and Qualities

Available water capacity: Low (about 5.1 inches)
Slowest saturated hydraulic conductivity: Moderately high (about 0.20 in/hr)
Drainage class: Well drained
Depth to seasonal high water table: About 3.3 to 5.5 feet
Water table kind: Perched
Flooding hazard: None
Ponding hazard: None
Shrink-swell potential: Low
Runoff class: Low
Parent material: Fluviomarine deposits

Use and Management Considerations

Cropland
Suitability: Moderately suited to corn, soybeans, and peanuts and well suited to cotton lint and tobacco
- The slope increases surface runoff, the hazard of erosion, and nutrient loss.
- Erosion has removed part of the surface soil, and the remaining surface soil is less productive and more difficult to manage.
- Soil crusting decreases water infiltration and interferes with the emergence of seedlings.

Pasture
Suitability: Well suited to pasture
- The slope increases surface runoff, the hazard of erosion, and nutrient loss.

Woodland
Suitability: Poorly suited to loblolly pine
- Coarse textured soil layers may slough, thus reducing the efficiency of mechanical planting equipment.
- The coarseness of the soil may reduce the traction of wheeled harvest equipment and log trucks.

Building sites
- The seasonal high water table may restrict the period when excavations can be made.

Septic tank absorption fields
- The seasonal high water table greatly limits the absorption and proper treatment of the effluent from conventional septic systems.
- The restricted permeability of the soil limits the absorption and proper treatment of the effluent from conventional septic systems.

Local roads and streets
- This soil is well suited to local roads and streets.

Interpretative Groups

Land capability class: 3e
Hydric soil: No
Prime farmland: Not prime farmland

EuA—Eunola sandy loam, 0 to 2 percent slopes, rarely flooded

Setting

Major land resource area: Southern Coastal Plain
Landform: Stream terraces

Position on the landform: Treads
Elevation: 125 to 194 feet

Map Unit Composition

Eunola and similar soils: Typically 80 percent; ranging from about 68 to 92 percent

Typical Profile

Surface layer:
0 to 7 inches—dark gray sandy loam
Subsurface layer:
7 to 10 inches—light yellowish brown sandy loam
Subsoil layer:
10 to 38 inches—brownish yellow sandy clay loam; light gray iron depletions and yellowish brown masses of oxidized iron
38 to 55 inches—light gray sandy clay loam; strong brown and very pale brown masses of oxidized iron
Substratum layer:
55 to 80 inches—light gray sandy loam; very pale brown masses of oxidized iron

Minor Components

- Myatt soils
- State soils

Soil Properties and Qualities

Available water capacity: Moderate (about 8.0 inches)
Slowest saturated hydraulic conductivity: Moderately high (about 0.20 in/hr)
Drainage class: Moderately well drained
Depth to seasonal high water table: About 0.9 to 2.8 feet
Water table kind: Apparent
Flooding hazard: Rare
Ponding hazard: None
Shrink-swell potential: Low
Runoff class: Low
Parent material: Alluvium

Use and Management Considerations

Cropland
Suitability: Moderately suited to corn, soybeans, and wheat and well suited to cotton lint
- Soil crusting decreases water infiltration and interferes with the emergence of seedlings.
- The seasonal high water table restricts equipment operation, decreases the viability of crops, and interferes with the planting and harvesting of crops.

Pasture
Suitability: Well suited to pasture

Woodland
Suitability: Well suited to loblolly pine and poorly suited to yellow-poplar and sweetgum
- This soil is well suited to roads and landings.
- Soil wetness may limit the use of the soil by log trucks.

Building sites
- Flooding makes the soil unsuited to building site development.

Septic tank absorption fields
- The seasonal high water table greatly limits the absorption and proper treatment of the effluent from conventional septic systems.

Local roads and streets
- This soil is moderately suited to local roads and streets.
- The seasonal high water table affects the ease of excavation and grading and reduces the bearing capacity of the soil.

Interpretative Groups

Land capability class: 2w
Hydric soil: No
Prime farmland: Prime farmland in all areas

FaA—Faceville loamy sand, 0 to 2 percent slopes

Setting

Major land resource area: Southern Coastal Plain
Landform: Marine terraces
Position on the landform: Shoulders and summits
Elevation: 239 to 436 feet

Map Unit Composition

Faceville and similar soils: Typically 90 percent; ranging from about 73 to 100 percent

Typical Profile

Surface layer:
0 to 7 inches—brown loamy sand
Subsurface layer:
7 to 13 inches—light yellowish brown loamy sand
Subsoil layer:
13 to 80 inches—red clay; common yellowish brown mottles

Minor Components

- Orangeburg soils

Soil Properties and Qualities

Available water capacity: Moderate (about 6.7 inches)
Slowest saturated hydraulic conductivity: Moderately high (about 0.57 in/hr)
Drainage class: Well drained
Depth to seasonal high water table: More than 6.0 feet
Flooding hazard: None
Ponding hazard: None
Shrink-swell potential: Low
Runoff class: Low
Parent material: Fluviomarine deposits

Use and Management Considerations

Cropland
Suitability: Moderately suited to corn, soybeans, and wheat and well suited to cotton lint and peanuts
- The high clay content restricts the rooting depth of crops.
- Soil crusting decreases water infiltration and interferes with the emergence of seedlings.

Pasture
Suitability: Well suited to pasture

Woodland
Suitability: Moderately suited to loblolly pine
- Coarse textured soil layers increase the need for maintenance of haul roads and log landings.
- Coarse textured soil layers may slough, thus reducing the efficiency of mechanical planting equipment.
- The coarseness of the soil may reduce the traction of wheeled harvest equipment and log trucks.

Building sites
- The high content of clay in the subsurface layer increases the difficulty of digging, filling, and compacting the soil material in shallow excavations.

Septic tank absorption fields
- This soil is well suited to septic tank absorption fields.

Local roads and streets
- This soil is moderately suited to local roads and streets.
- The low soil strength is unfavorable for supporting heavy loads.

Interpretative Groups

Land capability class: 1
Hydric soil: No
Prime farmland: Prime farmland in all areas

FaB—Faceville loamy sand, 2 to 6 percent slopes

Setting

Major land resource area: Southern Coastal Plain
Landform: Marine terraces
Position on the landform: Shoulders, summits, and backslopes
Elevation: 239 to 433 feet

Map Unit Composition

Faceville and similar soils: Typically 90 percent; ranging from about 73 to 100 percent

Typical Profile

Surface layer:
0 to 7 inches—brown loamy sand
Subsurface layer:
7 to 13 inches—light yellowish brown loamy sand
Subsoil layer:
13 to 80 inches—red clay; common yellowish brown mottles

Minor Components

- Orangeburg soils
- Nankin soils

Soil Properties and Qualities

Available water capacity: Moderate (about 6.7 inches)
Slowest saturated hydraulic conductivity: Moderately high (about 0.57 in/hr)
Drainage class: Well drained

Depth to seasonal high water table: More than 6.0 feet
Flooding hazard: None
Ponding hazard: None
Shrink-swell potential: Low
Runoff class: Low
Parent material: Fluviomarine deposits

Use and Management Considerations

Cropland
Suitability: Moderately suited to corn, soybeans, and wheat and well suited to cotton lint and peanuts
- The slope increases surface runoff, the hazard of erosion, and nutrient loss.
- The high clay content restricts the rooting depth of crops.
- Soil crusting decreases water infiltration and interferes with the emergence of seedlings.

Pasture
Suitability: Well suited to pasture
- The slope increases surface runoff, the hazard of erosion, and nutrient loss.

Woodland
Suitability: Moderately suited to loblolly pine
- Coarse textured soil layers increase the need for maintenance of haul roads and log landings.
- Coarse textured soil layers may slough, thus reducing the efficiency of mechanical planting equipment.
- The coarseness of the soil may reduce the traction of wheeled harvest equipment and log trucks.

Building sites
- The high content of clay in the subsurface layer increases the difficulty of digging, filling, and compacting the soil material in shallow excavations.

Septic tank absorption fields
- This soil is well suited to septic tank absorption fields.

Local roads and streets
- This soil is moderately suited to local roads and streets.
- The low soil strength may cause structural damage to local roads and streets.

Interpretative Groups

Land capability class: 2e
Hydric soil: No
Prime farmland: Prime farmland in all areas

FbB2—Faceville sandy loam, 2 to 6 percent slopes, moderately eroded

Setting

Major land resource area: Southern Coastal Plain
Landform: Marine terraces
Position on the landform: Shoulders, backslopes, and summits
Elevation: 239 to 436 feet

Map Unit Composition

Faceville and similar soils: Typically 75 percent; ranging from about 58 to 92 percent

Typical Profile

Surface layer:
0 to 6 inches—brown sandy loam
Subsoil layer:
6 to 80 inches—red clay; common yellowish brown mottles

Minor Components

- Nankin soils
- Lucy soils

Soil Properties and Qualities

Available water capacity: Moderate (about 7.2 inches)
Slowest saturated hydraulic conductivity: Moderately high (about 0.57 in/hr)
Drainage class: Well drained
Depth to seasonal high water table: More than 6.0 feet
Flooding hazard: None
Ponding hazard: None
Shrink-swell potential: Low
Runoff class: Low
Parent material: Fluviomarine deposits

Use and Management Considerations

Cropland
Suitability: Moderately suited to corn, soybeans, and wheat and well suited to cotton lint and peanuts
- The slope increases surface runoff, the hazard of erosion, and nutrient loss.
- Erosion has removed part of the surface soil, and the remaining surface soil is less productive and more difficult to manage.
- The high clay content restricts the rooting depth of crops.
- Soil crusting decreases water infiltration and interferes with the emergence of seedlings.

Pasture
Suitability: Well suited to pasture
- The slope increases surface runoff, the hazard of erosion, and nutrient loss.

Woodland
Suitability: Moderately suited to loblolly pine
- The low soil strength interferes with the construction of haul roads and log landings.
- The low soil strength may create unsafe conditions for log trucks.

Building sites
- The high content of clay in the subsurface layer increases the difficulty of digging, filling, and compacting the soil material in shallow excavations.

Septic tank absorption fields
- This soil is well suited to septic tank absorption fields.

Local roads and streets
- This soil is moderately suited to local roads and streets.
- The low soil strength is unfavorable for supporting heavy loads.

Interpretative Groups

Land capability class: 3e
Hydric soil: No
Prime farmland: Not prime farmland

FoB—Foxworth sand, 0 to 4 percent slopes

Setting

Major land resource area: Southern Coastal Plain and Carolina and Georgia Sand Hills
Landform: Sand sheets
Position on the landform: Summits and shoulders
Elevation: 144 to 210 feet

Map Unit Composition

Foxworth and similar soils: Typically 76 percent; ranging from about 65 to 88 percent

Typical Profile

Surface layer:
0 to 4 inches—brown sand
Substratum layer:
4 to 64 inches—brownish yellow sand
64 to 80 inches—white sand; yellow masses of oxidized iron

Minor Components

- Alaga soils
- Lucknow soils
- Lakeland soils
- Autryville soils

Soil Properties and Qualities

Available water capacity: Very low (about 3.0 inches)
Slowest saturated hydraulic conductivity: High (about 5.95 in/hr)
Drainage class: Somewhat excessively drained
Depth to seasonal high water table: About 4.0 to 6.3 feet
Water table kind: Apparent
Flooding hazard: None
Ponding hazard: None
Shrink-swell potential: Low
Runoff class: Very low
Parent material: Eolian sands

Use and Management Considerations

Cropland
Suitability: Not suited to cropland
- The limited available water capacity may cause plants to suffer from moisture stress.
- Sandy or coarse textured soil layers accelerate the rate at which plant nutrients are leached.
- Soil crusting decreases water infiltration and interferes with the emergence of seedlings.

Pasture
Suitability: Well suited to pasture

- The limited available water capacity may cause plants to suffer from moisture stress during the drier summer months.

Woodland
Suitability: Moderately suited to loblolly pine
- Coarse textured soil layers may slough, thus reducing the efficiency of mechanical planting equipment.
- The coarseness of the soil may reduce the traction of wheeled harvest equipment and log trucks.

Building sites
- The seasonal high water table may restrict the period when excavations can be made.
- The high content of sand or gravel in the soil increases sloughing and causes cutbanks to be more susceptible to caving.

Septic tank absorption fields
- The excessive permeability limits the proper treatment of the effluent from conventional septic systems and may pollute the water table.

Local roads and streets
- This soil is well suited to local roads and streets.

Interpretative Groups

Land capability class: 3s
Hydric soil: No
Prime farmland: Not prime farmland

FuB—Fuquay sand, 0 to 6 percent slopes

Setting

Major land resource area: Southern Coastal Plain
Landform: Marine terraces
Position on the landform: Summits, shoulders, and backslopes
Elevation: 216 to 377 feet

Map Unit Composition

Fuquay and similar soils: Typically 71 percent; ranging from about 62 to 80 percent

Typical Profile

Surface layer:
0 to 8 inches—brown sand
Subsurface layer:
8 to 27 inches—pale yellow sand
Subsoil layer:
27 to 42 inches—yellowish brown sandy clay loam; reddish brown masses of oxidized iron
42 to 80 inches—brownish yellow sandy clay loam; light gray iron depletions and plinthite nodules and red masses of oxidized iron

Minor Components

- Lucknow soils
- Wagram soils
- Dothan soils
- Ailey soils

Soil Properties and Qualities

Available water capacity: Low (about 3.5 inches)
Slowest saturated hydraulic conductivity: Moderately low (about 0.06 in/hr)
Drainage class: Well drained
Depth to seasonal high water table: About 3.3 to 4.7 feet
Water table kind: Apparent
Flooding hazard: None
Ponding hazard: None
Shrink-swell potential: Low
Runoff class: Low
Parent material: Fluviomarine deposits

Use and Management Considerations

Cropland
Suitability: Not suited to corn, cotton lint, soybeans, peanuts, or tobacco
- The limited available water capacity may cause plants to suffer from moisture stress.
- Sandy or coarse textured soil layers accelerate the rate at which plant nutrients are leached.
- Soil crusting decreases water infiltration and interferes with the emergence of seedlings.

Pasture
Suitability: Well suited to pasture
- The limited available water capacity may cause plants to suffer from moisture stress during the drier summer months.

Woodland
Suitability: Moderately suited to loblolly pine
- Coarse textured soil layers increase the need for maintenance of haul roads and log landings.
- Coarse textured soil layers may slough, thus reducing the efficiency of mechanical planting equipment.
- The coarseness of the soil may reduce the traction of wheeled harvest equipment and log trucks.

Building sites
- The seasonal high water table may restrict the period when excavations can be made.
- The high content of sand or gravel in the soil increases sloughing and causes cutbanks to be more susceptible to caving.

Septic tank absorption fields
- The seasonal high water table greatly limits the absorption and proper treatment of the effluent from conventional septic systems.
- The excessive permeability of the soil limits the proper treatment of the effluent from conventional septic systems and may pollute the water table.

Local roads and streets
- This soil is well suited to local roads and streets.

Interpretative Groups

Land capability class: 2s
Hydric soil: No
Prime farmland: Not prime farmland

GoA—Goldsboro sandy loam, 0 to 2 percent slopes

Setting

Major land resource area: Southern Coastal Plain
Landform: Marine terraces
Position on the landform: Summits
Elevation: 131 to 197 feet

Map Unit Composition

Goldsboro and similar soils: Typically 85 percent; ranging from about 77 to 94 percent

Typical Profile

Surface layer:
0 to 8 inches—brown sandy loam
Subsoil layer:
8 to 24 inches—brownish yellow sandy clay loam
24 to 35 inches—brownish yellow sandy clay loam; gray iron depletions and red masses of oxidized iron
35 to 80 inches—gray sandy clay loam; red and brownish yellow masses of oxidized iron

Minor Components

- Noboco soils
- Rains soils

Soil Properties and Qualities

Available water capacity: Moderate (about 8.4 inches)
Slowest saturated hydraulic conductivity: Moderately high (about 0.57 in/hr)
Drainage class: Moderately well drained
Depth to seasonal high water table: About 1.3 to 2.5 feet
Water table kind: Apparent
Flooding hazard: None
Ponding hazard: None
Shrink-swell potential: Low
Runoff class: Low
Parent material: Fluviomarine deposits

Use and Management Considerations

Cropland
Suitability: Moderately suited to corn, soybeans (fig. 4), peanuts, and wheat and well suited to cotton lint and tobacco
- The seasonal high water table restricts equipment operation, decreases the viability of crops, and interferes with the planting and harvesting of crops.

Pasture
Suitability: Well suited to pasture

Woodland
Suitability: Well suited to loblolly pine and poorly suited to southern red oak, yellow-poplar, and sweetgum
- This soil is well suited to roads and landings.
- Soil wetness may limit the use of the soil by log trucks.

Figure 4.—No-till soybeans in an area of Goldsboro sandy loam, 0 to 2 percent slopes.

Building sites
- The seasonal high water table may restrict the period when excavations can be made.

Septic tank absorption fields
- The seasonal high water table greatly limits the absorption and proper treatment of the effluent from conventional septic systems.

Local roads and streets
- This soil is moderately suited to local roads and streets.
- The seasonal high water table affects the ease of excavation and grading and reduces the bearing capacity of the soil.

Interpretative Groups

Land capability class: 2w
Hydric soil: No
Prime farmland: Prime farmland in all areas

JhA—Johns loamy sand, 0 to 2 percent slopes, rarely flooded

Setting

Major land resource area: Southern Coastal Plain
Landform: Stream terraces
Position on the landform: Treads
Elevation: 118 to 180 feet

Map Unit Composition

Johns and similar soils: Typically 77 percent; ranging from about 66 to 88 percent

Typical Profile

Surface layer:
0 to 7 inches—light olive brown loamy sand
Subsurface layer:
7 to 15 inches—light yellowish brown loamy sand
Subsoil layer:
15 to 36 inches—olive yellow sandy clay loam; light brownish gray iron depletions and yellowish brown masses of oxidized iron
Substratum layer:
36 to 80 inches—light brownish gray sand; very pale brown masses of oxidized iron

Minor Components

- Lumbee soils
- Kalmia soils
- Alaga soils

Soil Properties and Qualities

Available water capacity: Low (about 5.2 inches)
Slowest saturated hydraulic conductivity: Moderately high (about 0.57 in/hr)
Drainage class: Moderately well drained
Depth to seasonal high water table: About 1.0 to 2.5 feet
Water table kind: Apparent
Flooding hazard: Rare
Ponding hazard: None
Shrink-swell potential: Low
Runoff class: Low
Parent material: Alluvium

Use and Management Considerations

Cropland
Suitability: Moderately suited to corn, soybeans, and wheat and well suited to cotton lint, tobacco, and grass-legume hay
- The limited available water capacity may cause plants to suffer from moisture stress.
- Excessive permeability increases the risk of groundwater contamination.
- Soil crusting decreases water infiltration and interferes with the emergence of seedlings.
- The seasonal high water table restricts equipment operation, decreases the viability of crops, and interferes with the planting and harvesting of crops.

Pasture
Suitability: Well suited to pasture
- The limited available water capacity may cause plants to suffer from moisture stress during the drier summer months.

Woodland
Suitability: Well suited to loblolly pine and poorly suited to sweetgum
- Coarse textured soil layers increase the need for maintenance of haul roads and log landings.
- Soil wetness may limit the use of the soil by log trucks.
- Coarse textured soil layers may slough, thus reducing the efficiency of mechanical planting equipment.

- The coarseness of the soil may reduce the traction of wheeled harvest equipment and log trucks.

Building sites
- Flooding makes this soil unsuited to building site development.

Septic tank absorption fields
- The seasonal high water table greatly limits the absorption and proper treatment of the effluent from conventional septic systems.
- The excessive permeability of the soil limits the proper treatment of the effluent from conventional septic systems and may pollute the water table.

Local roads and streets
- This soil is moderately suited to local roads and streets.
- The seasonal high water table affects the ease of excavation and grading and reduces the bearing capacity of the soil.

Interpretative Groups

Land capability class: 2w
Hydric soil: No
Prime farmland: Prime farmland in all areas

JoA—Johnston muck, 0 to 2 percent slopes, frequently flooded

Setting

Major land resource area: Southern Coastal Plain and Carolina and Georgia Sand Hills
Landform: Swamps
Position on the landform: Flood plains
Elevation: 134 to 249 feet

Map Unit Composition

Johnston and similar soils: Typically 100 percent; ranging from about 90 to 100 percent

Typical Profile

Organic layer:
0 to 5 inches—very dark brown muck
Surface layer:
5 to 31 inches—black fine sandy loam
Substratum layer:
31 to 80 inches—light gray sand

Soil Properties and Qualities

Available water capacity: Moderate (about 6.8 inches)
Slowest saturated hydraulic conductivity: Moderately high (about 0.57 in/hr)
Drainage class: Very poorly drained
Depth to seasonal high water table: At the surface
Water table kind: Apparent
Flooding hazard: Frequent
Ponding hazard: None
Shrink-swell potential: Low
Runoff class: Very high
Parent material: Alluvium

Use and Management Considerations

Cropland
Suitability: Not suited to cropland
- Excessive permeability increases the risk of groundwater contamination.

Pasture
Suitability: Not suited to pasture

Woodland
Suitability: Moderately suited to yellow-poplar and sweetgum and poorly suited to baldcypress
- Flooding may result in damage to haul roads.
- Flooding restricts the safe use of roads by log trucks.
- Soil wetness may limit the use of the soil by log trucks.
- The low soil strength may create unsafe conditions for log trucks.

Building sites
- Flooding makes this soil unsuited to building site development.

Septic tank absorption fields
- Flooding makes this soil unsuited to septic tank absorption fields.
- The seasonal high water table makes this soil unsuited to conventional septic tank absorption fields.

Local roads and streets
- This soil is not suited to local roads and streets.
- Flooding may damage local roads and streets.
- The seasonal high water table affects the ease of excavation and grading and reduces the bearing capacity of the soil.

Interpretative Groups

Land capability class: 7w
Hydric soil: Yes
Prime farmland: Not prime farmland

JzA—Johnston-Mouzon complex, 0 to 2 percent slopes, frequently flooded

Setting

Major land resource area: Southern Coastal Plain
Landform: Swamps
Position on the landform: Johnston—flood plains; Mouzon—terraces
Elevation: 105 to 131 feet

Map Unit Composition

Johnston and similar soils: Typically 60 percent; ranging from about 32 to 88 percent
Mouzon and similar soils: Typically 40 percent; ranging from about 12 to 68 percent

Typical Profile

Johnston
Organic layer:
0 to 5 inches—very dark brown muck
Surface layer:
5 to 31 inches—black fine sandy loam

Substratum layer:
31 to 80 inches—light gray sand

Mouzon
Surface layer:
0 to 8 inches—dark gray fine sandy loam
Subsoil layer:
8 to 31 inches—gray sandy clay loam; olive yellow masses of oxidized iron
31 to 46 inches—gray fine sandy loam
Substratum layer:
46 to 80 inches—light brownish gray loamy fine sand

Soil Properties and Qualities

Available water capacity: Johnston—moderate (about 6.8 inches); Mouzon—moderate (about 7.4 inches)
Slowest saturated hydraulic conductivity: Johnston—moderately high (about 0.57 in/hr); Mouzon—moderately low (about 0.06 in/hr)
Drainage class: Johnston—very poorly drained; Mouzon—poorly drained
Depth to seasonal high water table: At the surface
Water table kind: Apparent
Flooding hazard: Frequent
Ponding hazard: None
Shrink-swell potential: Low
Runoff class: Very high
Parent material: Johnston—alluvium; Mouzon—fluviomarine deposits

Use and Management Considerations

Cropland
Suitability: Not suited to cropland
- Excessive permeability increases the risk of groundwater contamination.

Pasture
Suitability: Not suited to pasture

Woodland
Suitability: Moderately suited to yellow-poplar and sweetgum and poorly suited to baldcypress
- Flooding may result in damage to haul roads.
- Flooding restricts the safe use of roads by log trucks.
- Soil wetness may limit the use of these soils by log trucks.
- The low soil strength may create unsafe conditions for log trucks.

Building sites
- Flooding makes these soils unsuited to building site development.

Septic tank absorption fields
- Flooding makes these soils unsuited to septic tank absorption fields.
- The seasonal high water table makes these soils unsuited to conventional septic tank absorption fields.

Local roads and streets
- These soils are not suited to local roads and streets.
- Flooding may damage local roads and streets.
- The seasonal high water table affects the ease of excavation and grading and reduces the bearing capacity of these soils.

Interpretative Groups

Land capability class: Johnston—7w; Mouzon—6w
Hydric soil: Yes
Prime farmland: Not prime farmland

KaA—Kalmia loamy sand, wet substratum, 0 to 2 percent slopes, rarely flooded

Setting

Major land resource area: Southern Coastal Plain
Landform: Stream terraces
Position on the landform: Treads
Elevation: 118 to 190 feet

Map Unit Composition

Kalmia and similar soils: Typically 80 percent; ranging from about 62 to 98 percent

Typical Profile

Surface layer:
0 to 6 inches—brown loamy sand
Subsoil layer:
6 to 27 inches—yellowish brown sandy clay loam
Substratum layer:
27 to 42 inches—yellow loamy fine sand
42 to 80 inches—very pale brown coarse sand; very pale brown iron depletions

Minor Components

- Alaga soils
- Lumbee soils
- Johns soils

Soil Properties and Qualities

Available water capacity: Low (about 4.7 inches)
Slowest saturated hydraulic conductivity: Moderately high (about 0.57 in/hr)
Drainage class: Well drained
Depth to seasonal high water table: About 3.3 to 5.3 feet
Water table kind: Apparent
Flooding hazard: Rare
Ponding hazard: None
Shrink-swell potential: Low
Runoff class: Low
Parent material: Alluvium

Use and Management Considerations

Cropland
Suitability: Moderately suited to corn, soybeans, and wheat and well suited to cotton lint, peanuts, and tobacco
- The limited available water capacity may cause plants to suffer from moisture stress.
- Soil crusting decreases water infiltration and interferes with the emergence of seedlings.

Pasture
Suitability: Well suited to pasture

- The limited available water capacity may cause plants to suffer from moisture stress during the drier summer months.

Woodland

Suitability: Poorly suited to loblolly pine, southern red oak, yellow-poplar, and sweetgum

- Coarse textured soil layers increase the need for maintenance of haul roads and log landings.
- Coarse textured soil layers may slough, thus reducing the efficiency of mechanical planting equipment.
- The coarseness of the soil may reduce the traction of wheeled harvest equipment and log trucks.

Building sites

- Flooding makes this soil unsuited to building site development.

Septic tank absorption fields

- The seasonal high water table greatly limits the absorption and proper treatment of the effluent from conventional septic systems.
- The excessive permeability of the soil limits the proper treatment of the effluent from conventional septic systems and may pollute the water table.

Local roads and streets

- This soil is moderately suited to local roads and streets.

Interpretative Groups

Land capability class: 1
Hydric soil: No
Prime farmland: Prime farmland in all areas

LaB—Lakeland sand, 0 to 6 percent slopes

Setting

Major land resource area: Southern Coastal Plain
Landform: Dunes (fig. 5)
Position on the landform: Summits and shoulders
Elevation: 164 to 298 feet

Map Unit Composition

Lakeland and similar soils: Typically 85 percent; ranging from about 71 to 99 percent

Typical Profile

Surface layer:
0 to 5 inches—dark grayish brown sand
Substratum layer:
5 to 80 inches—yellow sand

Minor Components

- Lucknow soils
- Troup soils

Soil Properties and Qualities

Available water capacity: Very low (about 2.4 inches)
Slowest saturated hydraulic conductivity: High (about 5.95 in/hr)
Drainage class: Excessively drained

Figure 5.—An area of Lakeland sand, 0 to 6 percent slopes. This soil occurs on eolian dunes.

Depth to seasonal high water table: More than 6.0 feet
Flooding hazard: None
Ponding hazard: None
Shrink-swell potential: Low
Runoff class: Very low
Parent material: Eolian sands

Use and Management Considerations

Cropland
Suitability: Not suited to corn, soybeans, peanuts, or tobacco
- The slope increases surface runoff, the hazard of erosion, and nutrient loss.
- The limited available water capacity may cause plants to suffer from moisture stress.
- Sandy or coarse textured soil layers accelerate the rate at which plant nutrients are leached.
- Soil crusting decreases water infiltration and interferes with the emergence of seedlings.

Pasture
Suitability: Well suited to pasture
- The slope increases surface runoff, the hazard of erosion, and nutrient loss.
- The limited available water capacity may cause plants to suffer from moisture stress during the drier summer months.

Woodland
Suitability: Moderately suited to loblolly pine
- Coarse textured soil layers increase the need for maintenance of haul roads and log landings.
- Coarse textured soil layers may slough, thus reducing the efficiency of mechanical planting equipment.
- The coarseness of the soil may reduce the traction of wheeled harvest equipment and log trucks.

Building sites
- The high content of sand or gravel in the soil increases sloughing and causes cutbanks to be more susceptible to caving.

Septic tank absorption fields
- The excessive permeability of the soil limits the proper treatment of the effluent from conventional septic systems and may pollute the water table.

Local roads and streets
- This soil is well suited to local roads and streets.

Interpretative Groups

Land capability class: 4s
Hydric soil: No
Prime farmland: Not prime farmland

LaD—Lakeland sand, 6 to 15 percent slopes

Setting

Major land resource area: Southern Coastal Plain
Landform: Dunes
Position on the landform: Summits, shoulders, and backslopes
Elevation: 164 to 298 feet

Map Unit Composition

Lakeland and similar soils: Typically 95 percent; ranging from about 87 to 100 percent

Typical Profile

Surface layer:
0 to 5 inches—dark grayish brown sand
Substratum layer:
5 to 80 inches—yellow sand

Minor Components

- Lucknow soils

Soil Properties and Qualities

Available water capacity: Very low (about 2.4 inches)
Slowest saturated hydraulic conductivity: High (about 5.95 in/hr)
Drainage class: Excessively drained
Depth to seasonal high water table: More than 6.0 feet
Flooding hazard: None
Ponding hazard: None
Shrink-swell potential: Low
Runoff class: Low
Parent material: Eolian sands

Use and Management Considerations

Cropland
Suitability: Not suited to cropland

Pasture
Suitability: Not suited to pasture

Woodland

Suitability: Moderately suited to loblolly pine

- The slope creates unsafe operating conditions and reduces the operating efficiency of log trucks.
- The slope may restrict the use of some mechanical planting equipment.
- Coarse textured soil layers may slough, thus reducing the efficiency of mechanical planting equipment.
- The coarseness of the soil may reduce the traction of wheeled harvest equipment and log trucks.

Building sites

- The slope influences the use of machinery and the amount of excavation required.
- The high content of sand or gravel in the soil increases sloughing and causes cutbanks to be more susceptible to caving.

Septic tank absorption fields

- The slope limits the proper treatment of effluent from conventional septic systems.

Local roads and streets

- This soil is moderately suited to local roads and streets.
- The slope makes it difficult to design local roads and streets.

Interpretative Groups

Land capability class: 7s
Hydric soil: No
Prime farmland: Not prime farmland

LbB—Lucknow coarse sand, 0 to 4 percent slopes

Setting

Major land resource area: Southern Coastal Plain
Landform: Marine terraces
Position on the landform: Footslopes, summits, and shoulders
Elevation: 197 to 371 feet

Map Unit Composition

Lucknow and similar soils: Typically 71 percent; ranging from about 59 to 83 percent

Typical Profile

Surface layer:
0 to 8 inches—brown coarse sand
Subsurface layer:
8 to 48 inches—light yellowish brown sand
Subsoil layer:
48 to 80 inches—brownish yellow sandy clay loam; light gray iron depletions and yellowish red masses of oxidized iron

Minor Components

- Fuquay soils
- Candor soils
- Troup soils

Soil Properties and Qualities

Available water capacity: Low (about 3.6 inches)
Slowest saturated hydraulic conductivity: Moderately high (about 0.20 in/hr)

Drainage class: Somewhat excessively drained
Depth to seasonal high water table: About 3.3 to 6.9 feet
Water table kind: Apparent
Flooding hazard: None
Ponding hazard: None
Shrink-swell potential: Low
Runoff class: Very low
Parent material: Fluviomarine deposits

Use and Management Considerations

Cropland
Suitability: Not suited to corn, soybeans, peanuts, or tobacco
- The limited available water capacity may cause plants to suffer from moisture stress.
- Soil crusting decreases water infiltration and interferes with the emergence of seedlings.

Pasture
Suitability: Well suited to pasture
- The limited available water capacity may cause plants to suffer from moisture stress during the drier summer months.

Woodland
Suitability: Well suited to loblolly pine and poorly suited to southern red oak
- Coarse textured soil layers increase the need for maintenance of haul roads and log landings.
- Coarse textured soil layers may slough, thus reducing the efficiency of mechanical planting equipment.
- The coarseness of the soil may reduce the traction of wheeled harvest equipment and log trucks.

Building sites
- The seasonal high water table may restrict the period when excavations can be made.
- The high content of sand or gravel in the soil increases sloughing and causes cutbanks to be more susceptible to caving.

Septic tank absorption fields
- The seasonal high water table greatly limits the absorption and proper treatment of the effluent from conventional septic systems.
- The excessive permeability of the soil limits the proper treatment of the effluent from conventional septic systems and may pollute the water table.

Local roads and streets
- This soil is well suited to local roads and streets.

Interpretative Groups

Land capability class: 3s
Hydric soil: No
Prime farmland: Not prime farmland

LcB—Lucy sand, 0 to 6 percent slopes

Setting

Major land resource area: Southern Coastal Plain
Landform: Marine terraces

Position on the landform: Summits, shoulders, and backslopes
Elevation: 249 to 426 feet

Map Unit Composition

Lucy and similar soils: Typically 87 percent; ranging from about 76 to 97 percent

Typical Profile

Surface layer:
0 to 7 inches—dark grayish brown sand
Subsurface layer:
7 to 22 inches—light yellowish brown sand
Subsoil layer:
22 to 80 inches—red sandy clay loam

Minor Components

- Troup soils
- Orangeburg soils

Soil Properties and Qualities

Available water capacity: Moderate (about 6.2 inches)
Slowest saturated hydraulic conductivity: Moderately high (about 0.57 in/hr)
Drainage class: Well drained
Depth to seasonal high water table: More than 6.0 feet
Flooding hazard: None
Ponding hazard: None
Shrink-swell potential: Low
Runoff class: Low
Parent material: Fluviomarine deposits

Use and Management Considerations

Cropland
Suitability: Not suited to corn, cotton lint, soybeans, or peanuts
- The slope increases surface runoff, the hazard of erosion, and nutrient loss.
- Sandy or coarse textured soil layers accelerate the rate at which plant nutrients are leached.
- Soil crusting decreases water infiltration and interferes with the emergence of seedlings.

Pasture
Suitability: Well suited to pasture
- The slope increases surface runoff, the hazard of erosion, and nutrient loss.

Woodland
Suitability: Moderately suited to loblolly pine
- Coarse textured soil layers increase the need for maintenance of haul roads and log landings.
- Coarse textured soil layers may slough, thus reducing the efficiency of mechanical planting equipment.
- The coarseness of the soil may reduce the traction of wheeled harvest equipment and log trucks.

Building sites
- The high content of sand or gravel in the soil increases sloughing and causes cutbanks to be more susceptible to caving.

Septic tank absorption fields
- This soil is well suited to septic tank absorption fields.

Local roads and streets
- This soil is well suited to local roads and streets.

Interpretative Groups

Land capability class: 2s
Hydric soil: No
Prime farmland: Not prime farmland

LuA—Lumbee sandy loam, 0 to 2 percent slopes, rarely flooded

Setting

Major land resource area: Southern Coastal Plain
Landform: Stream terraces
Position on the landform: Treads
Elevation: 131 to 141 feet

Map Unit Composition

Lumbee and similar soils: Typically 80 percent; ranging from about 65 to 95 percent

Typical Profile

Surface layer:
0 to 8 inches—very dark gray sandy loam
Subsoil layer:
8 to 28 inches—light brownish gray sandy clay loam; yellow and brownish yellow masses of oxidized iron
Substratum layer:
28 to 80 inches—light gray coarse sand

Minor Components

- Myatt soils
- Johns soils

Soil Properties and Qualities

Available water capacity: Low (about 5.0 inches)
Slowest saturated hydraulic conductivity: Moderately high (about 0.57 in/hr)
Drainage class: Poorly drained
Depth to seasonal high water table: At the surface to a depth of 0.8 foot
Water table kind: Apparent
Flooding hazard: Rare (fig. 6)
Ponding hazard: None
Shrink-swell potential: Low
Runoff class: Low
Parent material: Alluvium

Use and Management Considerations

Cropland
Suitability: Moderately suited to corn and soybeans and well suited to grass-legume hay

Figure 6.—Flooding in an area of Lumbee sandy loam, 0 to 2 percent slopes, rarely flooded.

- The limited available water capacity may cause plants to suffer from moisture stress.
- Excessive permeability increases the risk of groundwater contamination.
- The seasonal high water table restricts equipment operation, decreases the viability of crops, and interferes with the planting and harvesting of crops.

Pasture

Suitability: Well suited to pasture

- The limited available water capacity may cause plants to suffer from moisture stress during the drier summer months.
- The seasonal high water table can affect equipment use, grazing patterns, and the viability of grass and legume species.

Woodland

Suitability: Poorly suited to loblolly pine and sweetgum

- This soil is well suited to roads and landings.
- Soil wetness may limit the use of the soil by log trucks.

Building sites

- Flooding makes this soil unsuited to building site development.

Septic tank absorption fields

- The seasonal high water table makes this soil unsuited to conventional septic tank absorption fields.

Local roads and streets

- This soil is not suited to local roads and streets.
- The seasonal high water table affects the ease of excavation and grading and reduces the bearing capacity of the soil.

Interpretative Groups

Land capability class: 3w
Hydric soil: Yes
Prime farmland: Not prime farmland

LyA—Lynchburg sandy loam, 0 to 2 percent slopes

Setting

Major land resource area: Southern Coastal Plain
Landform: Marine terraces
Position on the landform: Summits
Elevation: 131 to 174 feet

Map Unit Composition

Lynchburg and similar soils: Typically 88 percent; ranging from about 80 to 96 percent

Typical Profile

Surface layer:
0 to 7 inches—very dark gray sandy loam
Subsoil layer:
7 to 14 inches—olive yellow sandy clay loam; olive yellow masses of oxidized iron
14 to 80 inches—gray sandy clay loam; brownish yellow masses of oxidized iron

Minor Components

- Goldsboro soils
- Rains soils

Soil Properties and Qualities

Available water capacity: Moderate (about 8.2 inches)
Slowest saturated hydraulic conductivity: Moderately high (about 0.57 in/hr)
Drainage class: Somewhat poorly drained
Depth to seasonal high water table: About 0.5 to 1.8 feet
Water table kind: Apparent
Flooding hazard: None
Ponding hazard: None
Shrink-swell potential: Low
Runoff class: Low
Parent material: Fluviomarine deposits

Use and Management Considerations

Cropland
Suitability: Moderately suited to corn (fig. 7), soybeans, and wheat and well suited to cotton lint and tobacco
- The seasonal high water table restricts equipment operation, decreases the viability of crops, and interferes with the planting and harvesting of crops.

Pasture
Suitability: Well suited to pasture
- The seasonal high water table can affect equipment use, grazing patterns, and the viability of grass and legume species.

Woodland
Suitability: Well suited to loblolly pine and poorly suited to southern red oak and sweetgum

Figure 7.—Corn growing in an area of Lynchburg sandy loam, 0 to 2 percent slopes.

- This soil is well suited to roads and landings.
- Soil wetness may limit the use of the soil by log trucks.

Building sites
- The seasonal high water table may restrict the period when excavations can be made.

Septic tank absorption fields
- The seasonal high water table greatly limits the absorption and proper treatment of the effluent from conventional septic systems.

Local roads and streets
- This soil is moderately suited to local roads and streets.
- The seasonal high water table affects the ease of excavation and grading and reduces the bearing capacity of the soil.

Interpretative Groups

Land capability class: 2w
Hydric soil: No
Prime farmland: Prime farmland if drained

MaA—Marvyn sand, 0 to 2 percent slopes

Setting

Major land resource area: Carolina and Georgia Sand Hills
Landform: Marine terraces
Position on the landform: Summits
Elevation: 197 to 295 feet

Map Unit Composition

Marvyn and similar soils: Typically 90 percent; ranging from about 73 to 100 percent

Typical Profile

Surface layer:
0 to 6 inches—brown sand
Subsoil layer:
6 to 47 inches—reddish yellow sandy clay loam
Substratum layer:
47 to 80 inches—very pale brown loamy fine sand

Minor Components

- Ailey soils
- Pelion soils

Soil Properties and Qualities

Available water capacity: Moderate (about 7.6 inches)
Slowest saturated hydraulic conductivity: Moderately high (about 0.57 in/hr)
Drainage class: Well drained
Depth to seasonal high water table: More than 6.0 feet
Flooding hazard: None
Ponding hazard: None
Shrink-swell potential: Low
Runoff class: Low
Parent material: Fluviomarine deposits

Use and Management Considerations

Cropland
Suitability: Moderately suited to corn, soybeans, and wheat and well suited to cotton lint
- Soil crusting decreases water infiltration and interferes with the emergence of seedlings.

Pasture
Suitability: Well suited to pasture

Woodland
Suitability: Poorly suited to loblolly pine
- Coarse textured soil layers increase the need for maintenance of haul roads and log landings.
- Coarse textured soil layers may slough, thus reducing the efficiency of mechanical planting equipment.
- The coarseness of the soil may reduce the traction of wheeled harvest equipment and log trucks.
- The stickiness of the soil reduces the efficiency of mechanical planting equipment.

Building sites
- The dense nature of the subsurface layer increases the difficulty of digging and compacting the soil material in shallow excavations.

Septic tank absorption fields
- This soil is well suited to septic tank absorption fields.

Local roads and streets
- This soil is well suited to local roads and streets.

Interpretative Groups

Land capability class: 1
Hydric soil: No
Prime farmland: Prime farmland in all areas

MaB—Marvyn sand, 2 to 6 percent slopes

Setting

Major land resource area: Carolina and Georgia Sand Hills
Landform: Marine terraces
Position on the landform: Summits and shoulders
Elevation: 197 to 295 feet

Map Unit Composition

Marvyn and similar soils: Typically 90 percent; ranging from about 73 to 100 percent

Typical Profile

Surface layer:
0 to 6 inches—brown sand
Subsoil layer:
6 to 47 inches—reddish yellow sandy clay loam
Substratum layer:
47 to 80 inches—very pale brown loamy fine sand

Minor Components

- Ailey soils
- Pelion soils

Soil Properties and Qualities

Available water capacity: Moderate (about 7.9 inches)
Slowest saturated hydraulic conductivity: Moderately high (about 0.57 in/hr)
Drainage class: Well drained
Depth to seasonal high water table: More than 6.0 feet
Flooding hazard: None
Ponding hazard: None
Shrink-swell potential: Low
Runoff class: Low
Parent material: Fluviomarine deposits

Use and Management Considerations

Cropland
Suitability: Moderately suited to corn, soybeans, and wheat and well suited to cotton lint
- The slope increases surface runoff, the hazard of erosion, and nutrient loss.
- Soil crusting decreases water infiltration and interferes with the emergence of seedlings.

Pasture
Suitability: Well suited to pasture
- The slope increases surface runoff, the hazard of erosion, and nutrient loss.

Woodland
Suitability: Poorly suited to loblolly pine
- The stickiness of the soil reduces the efficiency of mechanical planting equipment.

Building sites
- The dense nature of the subsurface layer increases the difficulty of digging and compacting the soil material in shallow excavations.

Septic tank absorption fields
- This soil is well suited to septic tank absorption fields.

Local roads and streets
- This soil is well suited to local roads and streets.

Interpretative Groups

Land capability class: 2e
Hydric soil: No
Prime farmland: Prime farmland in all areas

MeA—Meggett sandy loam, 0 to 2 percent slopes, occasionally flooded

Setting

Major land resource area: Southern Coastal Plain
Landform: Stream terraces
Position on the landform: Treads
Elevation: 125 to 134 feet

Map Unit Composition

Meggett and similar soils: Typically 95 percent; ranging from about 87 to 100 percent

Typical Profile

Surface layer:
0 to 5 inches—very dark gray sandy loam
Subsoil layer:
5 to 51 inches—gray clay; yellow masses of oxidized iron
Substratum layer:
51 to 80 inches—light brownish gray coarse sand

Minor Components

- Lumbee soils

Soil Properties and Qualities

Available water capacity: Moderate (about 6.0 inches)
Slowest saturated hydraulic conductivity: Moderately low (about 0.06 in/hr)
Drainage class: Poorly drained
Depth to seasonal high water table: At the surface
Water table kind: Apparent
Flooding hazard: Occasional
Ponding hazard: None
Shrink-swell potential: High
Runoff class: High
Parent material: Alluvium

Use and Management Considerations

Cropland
Suitability: Not suited to cropland

Pasture
Suitability: Well suited to pasture
- Flooding may damage pastures.
- The seasonal high water table can affect equipment use, grazing patterns, and the viability of grass and legume species.

Woodland
Suitability: Poorly suited to loblolly pine
- Flooding may result in damage to haul roads.
- The low soil strength interferes with the construction of haul roads and log landings.
- The stickiness increases the difficulty of constructing haul roads and log landings when the soil is wet.
- Flooding restricts the safe use of roads by log trucks.
- Soil wetness may limit the use of the soil by log trucks.
- The stickiness of the soil reduces the efficiency of mechanical planting equipment.
- The stickiness of the soil restricts the use of equipment for site preparation to drier periods.

Building sites
- Flooding makes this soil unsuited to building site development.

Septic tank absorption fields
- Flooding makes this soil unsuited to septic tank absorption fields.
- The seasonal high water table makes this soil unsuited to conventional septic tank absorption fields.

Local roads and streets
- This soil is not suited to local roads and streets.
- Flooding may damage local roads and streets.
- The seasonal high water table affects the ease of excavation and grading and reduces the bearing capacity of the soil.
- Shrinking and swelling restrict the use of the soil as base material for local roads and streets.
- The low soil strength is unfavorable for supporting heavy loads.

Interpretative Groups

Land capability class: 6w
Hydric soil: Yes
Prime farmland: Not prime farmland

MyA—Myatt-Paxville complex, 0 to 2 percent slopes, occasionally flooded

Setting

Major land resource area: Southern Coastal Plain
Landform: Stream terraces
Position on the landform: Treads
Elevation: 134 to 190 feet

Map Unit Composition

Myatt and similar soils: Typically 50 percent; ranging from about 21 to 79 percent
Paxville and similar soils: Typically 40 percent; ranging from about 12 to 68 percent

Typical Profile

Myatt
Surface layer:
0 to 7 inches—very dark gray sandy loam
Subsurface layer:
7 to 13 inches—dark gray loam
Subsoil layer:
13 to 50 inches—gray clay loam; yellow masses of oxidized iron
Substratum layer:
50 to 80 inches—gray loamy sand

Paxville
Surface layer:
0 to 13 inches—black coarse sandy loam
Subsoil layer:
13 to 48 inches—dark gray sandy clay loam; brownish yellow masses of oxidized iron
Substratum layer:
48 to 80 inches—grayish brown loamy coarse sand

Minor Components

- Lumbee soils

Soil Properties and Qualities

Myatt
Available water capacity: Myatt—moderate (about 7.3 inches); Paxville—moderate (about 7.6 inches)
Slowest saturated hydraulic conductivity: Myatt—moderately high (about 0.20 in/hr); Paxville—moderately high (about 0.57 in/hr)
Drainage class: Myatt—poorly drained; Paxville—very poorly drained
Depth to seasonal high water table: Myatt—about 0.3 to 1.4 feet; Paxville—at the surface
Water table kind: Apparent
Flooding hazard: Occasional
Ponding hazard: None
Shrink-swell potential: Low
Runoff class: Low
Parent material: Alluvium

Use and Management Considerations

Cropland
Suitability: Moderately suited to corn, cotton lint, and soybeans
- Soil crusting decreases water infiltration and interferes with the emergence of seedlings.
- Flooding may damage crops.
- The seasonal high water table restricts equipment operation, decreases the viability of crops, and interferes with the planting and harvesting of crops.

Pasture
Suitability: Well suited to pasture
- Flooding may damage pastures.
- The seasonal high water table can affect equipment use, grazing patterns, and the viability of grass and legume species.

Woodland
Suitability: Well suited to loblolly pine and poorly suited to sweetgum

- Flooding may result in damage to haul roads.
- Coarse textured soil layers increase the need for maintenance of haul roads and log landings.
- Flooding restricts the safe use of roads by log trucks.
- Soil wetness may limit the use of these soils by log trucks.
- Coarse textured soil layers may slough, thus reducing the efficiency of mechanical planting equipment.
- The coarseness of the soil may reduce the traction of wheeled harvest equipment and log trucks.

Building sites
- Flooding makes these soils unsuited to building site development.

Septic tank absorption fields
- Flooding makes these soils unsuited to septic tank absorption fields.

Local roads and streets
- These soils are not suited to local roads and streets.
- Flooding may damage local roads and streets.
- The seasonal high water table affects the ease of excavation and grading and reduces the bearing capacity of these soils.
- The low soil strength is unfavorable for supporting heavy loads.

Interpretative Groups

Land capability class: Myatt—4w; Paxville—6w
Hydric soil: Yes
Prime farmland: Not prime farmland

NaB2—Nankin sandy clay loam, 2 to 6 percent slopes, moderately eroded

Setting

Major land resource area: Southern Coastal Plain
Landform: Marine terraces
Position on the landform: Backslopes and shoulders
Elevation: 197 to 298 feet

Map Unit Composition

Nankin and similar soils: Typically 84 percent; ranging from about 75 to 94 percent

Typical Profile

Surface layer:
0 to 6 inches—reddish brown sandy clay loam
Subsoil layer:
6 to 51 inches—red clay
51 to 80 inches—yellowish red sandy clay loam; white iron depletions and brownish yellow masses of oxidized iron

Minor Components

- Barnwell soils
- Faceville soils
- Pelion soils

Soil Properties and Qualities

Available water capacity: Moderate (about 7.2 inches)
Slowest saturated hydraulic conductivity: Moderately high (about 0.20 in/hr)
Drainage class: Well drained
Depth to seasonal high water table: More than 6.0 feet
Flooding hazard: None
Ponding hazard: None
Shrink-swell potential: Low
Runoff class: Low
Parent material: Fluviomarine deposits

Use and Management Considerations

Cropland
Suitability: Moderately suited to corn, soybeans, wheat, and tobacco and well suited to cotton lint and peanuts
- The slope increases surface runoff, the hazard of erosion, and nutrient loss.
- Erosion has removed part of the surface soil, and the remaining surface soil is less productive and more difficult to manage.
- The high clay content restricts the rooting depth of crops.
- The risk of compaction increases when the soil is wet.
- Soil crusting decreases water infiltration and interferes with the emergence of seedlings.

Pasture
Suitability: Well suited to pasture
- The slope increases surface runoff, the hazard of erosion, and nutrient loss.

Woodland
Suitability: Poorly suited to loblolly pine
- The low soil strength interferes with the construction of haul roads and log landings.
- This soil is well suited to equipment operations.

Building sites
- The high content of clay in the subsurface layer increases the difficulty of digging, filling, and compacting the soil material in shallow excavations.

Septic tank absorption fields
- The restricted permeability of the soil limits the absorption and proper treatment of the effluent from conventional septic systems.

Local roads and streets
- This soil is well suited to local roads and streets.

Interpretative Groups

Land capability class: 3e
Hydric soil: No
Prime farmland: Not prime farmland

NbC—Nankin-Lucy complex, 6 to 10 percent slopes

Setting

Major land resource area: Southern Coastal Plain
Landform: Marine terraces
Position on the landform: Backslopes and shoulders
Elevation: 249 to 420 feet

Map Unit Composition

Nankin and similar soils: Typically 50 percent; ranging from about 31 to 69 percent
Lucy and similar soils: Typically 40 percent; ranging from about 21 to 59 percent

Typical Profile

Nankin
Surface layer:
0 to 3 inches—brown loamy sand
Subsoil layer:
3 to 20 inches—red sandy clay
20 to 56 inches—yellowish red sandy clay loam; brownish yellow iron depletions
56 to 80 inches—yellowish red sandy clay loam; light brownish gray and brownish yellow iron depletions

Lucy
Surface layer:
0 to 7 inches—dark grayish brown sand
Subsurface layer:
7 to 22 inches—light yellowish brown sand
Subsoil layer:
22 to 80 inches—red sandy clay loam

Minor Components

- Ailey soils

Soil Properties and Qualities

Nankin
Available water capacity: Nankin—moderate (about 6.9 inches); Lucy—moderate (about 6.2 inches)
Slowest saturated hydraulic conductivity: Nankin—moderately high (about 0.20 in/hr); Lucy—moderately high (about 0.57 in/hr)
Drainage class: Well drained
Depth to seasonal high water table: More than 6.0 feet
Flooding hazard: None
Ponding hazard: None
Shrink-swell potential: Low
Runoff class: Nankin—medium; Lucy—low
Parent material: Fluviomarine deposits

Use and Management Considerations

Cropland
Suitability: Not suited to corn, soybeans, peanuts, or tobacco
- The slope increases surface runoff, the hazard of erosion, and nutrient loss.
- The high clay content restricts the rooting depth of crops.
- Soil crusting decreases water infiltration and interferes with the emergence of seedlings.

Pasture
Suitability: Well suited to pasture
- The slope increases surface runoff, the hazard of erosion, and nutrient loss.

Woodland
Suitability: Poorly suited to loblolly pine
- Coarse textured soil layers increase the need for maintenance of haul roads and log landings.

- The slope creates unsafe operating conditions and reduces the operating efficiency of log trucks.
- The slope may restrict the use of some mechanical planting equipment.
- Coarse textured soil layers may slough, thus reducing the efficiency of mechanical planting equipment.
- The coarseness of the soil may reduce the traction of wheeled harvest equipment and log trucks.

Building sites
- The slope influences the use of machinery and the amount of excavation required.
- The high content of sand or gravel in the soil increases sloughing and causes cutbanks to be more susceptible to caving.

Septic tank absorption fields
- The restricted permeability of these soils limits the absorption and proper treatment of the effluent from conventional septic systems.
- The slope limits the proper treatment of effluent from conventional septic systems.

Local roads and streets
- These soils are moderately suited to local roads and streets.
- The low soil strength is unfavorable for supporting heavy loads.
- The slope makes it difficult to design local roads and streets.

Interpretative Groups

Land capability class: Nankin—3e; Lucy—3s
Hydric soil: No
Prime farmland: Not prime farmland

NbD—Nankin-Lucy complex, 10 to 15 percent slopes

Setting

Major land resource area: Southern Coastal Plain
Landform: Marine terraces
Position on the landform: Backslopes and shoulders
Elevation: 351 to 410 feet

Map Unit Composition

Nankin and similar soils: Typically 70 percent; ranging from about 43 to 97 percent
Lucy and similar soils: Typically 20 percent; ranging from about 0 to 43 percent

Typical Profile

Nankin
Surface layer:
0 to 3 inches—brown loamy sand
Subsoil layer:
3 to 20 inches—red sandy clay
20 to 56 inches—yellowish red sandy clay loam; brownish yellow iron depletions
56 to 80 inches—yellowish red sandy clay loam; light brownish gray and brownish yellow iron depletions

Lucy
Surface layer:
0 to 7 inches—dark grayish brown sand
Subsurface layer:
7 to 22 inches—light yellowish brown sand

Subsoil layer:
22 to 80 inches—red sandy clay loam

Minor Components

- Barnwell soils

Soil Properties and Qualities

Nankin
Available water capacity: Nankin—moderate (about 6.9 inches); Lucy—moderate (about 6.2 inches)
Slowest saturated hydraulic conductivity: Nankin—moderately high (about 0.20 in/hr); Lucy—moderately high (about 0.57 in/hr)
Drainage class: Well drained
Depth to seasonal high water table: More than 6.0 feet
Flooding hazard: None
Ponding hazard: None
Shrink-swell potential: Low
Runoff class: Nankin—medium; Lucy—low
Parent material: Fluviomarine deposits

Use and Management Considerations

Cropland
Suitability: Not suited to corn, soybeans, peanuts, or tobacco
- The slope increases surface runoff, the hazard of erosion, and nutrient loss.
- The high clay content restricts the rooting depth of crops.
- Soil crusting decreases water infiltration and interferes with the emergence of seedlings.

Pasture
Suitability: Not suited to pasture
- The slope increases surface runoff, the hazard of erosion, and nutrient loss.

Woodland
Suitability: Poorly suited to loblolly pine
- Coarse textured soil layers increase the need for maintenance of haul roads and log landings.
- The slope creates unsafe operating conditions and reduces the operating efficiency of log trucks.
- The slope may restrict the use of some mechanical planting equipment.
- Coarse textured soil layers may slough, thus reducing the efficiency of mechanical planting equipment.
- The coarseness of the soil may reduce the traction of wheeled harvest equipment and log trucks.

Building sites
- The slope influences the use of machinery and the amount of excavation required.
- The high content of sand or gravel in the soil increases sloughing and causes cutbanks to be more susceptible to caving.

Septic tank absorption fields
- The restricted permeability of these soils limits the absorption and proper treatment of the effluent from conventional septic systems.
- The slope limits the proper treatment of effluent from conventional septic systems.

Local roads and streets
- These soils are moderately suited to local roads and streets.

- The low soil strength is unfavorable for supporting heavy loads.
- The slope makes it difficult to design local roads and streets.

Interpretative Groups

Land capability class: Nankin—4e; Lucy—4s
Hydric soil: No
Prime farmland: Not prime farmland

NeB—Noboco loamy sand, 2 to 6 percent slopes

Setting

Major land resource area: Southern Coastal Plain
Landform: Marine terraces
Position on the landform: Shoulders and backslopes
Elevation: 148 to 197 feet

Map Unit Composition

Noboco and similar soils: Typically 75 percent; ranging from about 58 to 92 percent

Typical Profile

Surface layer:
0 to 10 inches—dark grayish brown loamy sand
Subsurface layer:
10 to 13 inches—pale brown loamy sand
Subsoil layer:
13 to 34 inches—yellowish brown sandy clay loam
34 to 80 inches—yellowish brown sandy clay loam; gray iron depletions and red and strong brown masses of oxidized iron

Minor Components

- Goldsboro soils
- Norfolk soils
- Bonneau soils

Soil Properties and Qualities

Available water capacity: Moderate (about 7.7 inches)
Slowest saturated hydraulic conductivity: Moderately high (about 0.20 in/hr)
Drainage class: Well drained
Depth to seasonal high water table: About 2.8 to 3.5 feet
Water table kind: Apparent
Flooding hazard: None
Ponding hazard: None
Shrink-swell potential: Low
Runoff class: Low
Parent material: Fluviomarine deposits

Use and Management Considerations

Cropland
Suitability: Moderately suited to corn, soybeans, and wheat and well suited to cotton lint, peanuts, and tobacco
- The slope increases surface runoff, the hazard of erosion, and nutrient loss.
- Excessive permeability increases the risk of groundwater contamination.

- Soil crusting decreases water infiltration and interferes with the emergence of seedlings.

Pasture
Suitability: Well suited to pasture
- The slope increases surface runoff, the hazard of erosion, and nutrient loss.

Woodland
Suitability: Well suited to loblolly pine and poorly suited to southern red oak and sweetgum
- Coarse textured soil layers increase the need for maintenance of haul roads and log landings.
- Coarse textured soil layers may slough, thus reducing the efficiency of mechanical planting equipment.
- The coarseness of the soil may reduce the traction of wheeled harvest equipment and log trucks.

Building sites
- The seasonal high water table may restrict the period when excavations can be made.

Septic tank absorption fields
- The seasonal high water table greatly limits the absorption and proper treatment of the effluent from conventional septic systems.

Local roads and streets
- This soil is well suited to local roads and streets.

Interpretative Groups

Land capability class: 2e
Hydric soil: No
Prime farmland: Prime farmland in all areas

NmB2—Noboco sandy loam, 2 to 6 percent slopes, moderately eroded

Setting

Major land resource area: Southern Coastal Plain
Landform: Marine terraces
Position on the landform: Shoulders and backslopes
Elevation: 148 to 197 feet

Map Unit Composition

Noboco and similar soils: Typically 92 percent; ranging from about 83 to 100 percent

Typical Profile

Surface layer:
0 to 6 inches—yellowish brown sandy loam
Subsoil layer:
6 to 34 inches—yellowish brown sandy clay loam
34 to 80 inches—yellowish brown sandy clay loam; gray iron depletions and red and strong brown masses of oxidized iron

Minor Components

- Norfolk soils
- Goldsboro soils

Soil Properties and Qualities

Available water capacity: Moderate (about 8.3 inches)
Slowest saturated hydraulic conductivity: Moderately high (about 0.20 in/hr)
Drainage class: Well drained
Depth to seasonal high water table: About 2.8 to 3.5 feet
Water table kind: Apparent
Flooding hazard: None
Ponding hazard: None
Shrink-swell potential: Low
Runoff class: Low
Parent material: Fluviomarine deposits

Use and Management Considerations

Cropland
Suitability: Moderately suited to corn, soybeans, and wheat and well suited to cotton lint, peanuts, and tobacco
- The slope increases surface runoff, the hazard of erosion, and nutrient loss.
- Erosion has removed part of the surface soil, and the remaining surface soil is less productive and more difficult to manage.
- Soil crusting decreases water infiltration and interferes with the emergence of seedlings.

Pasture
Suitability: Well suited to pasture
- The slope increases surface runoff, the hazard of erosion, and nutrient loss.

Woodland
Suitability: Well suited to loblolly pine and poorly suited to southern red oak and sweetgum
- This soil is well suited to roads and landings.
- This soil is well suited to equipment operations.

Building sites
- The seasonal high water table may restrict the period when excavations can be made.

Septic tank absorption fields
- The seasonal high water table greatly limits the absorption and proper treatment of the effluent from conventional septic systems.

Local roads and streets
- This soil is well suited to local roads and streets.

Interpretative Groups

Land capability class: 3e
Hydric soil: No
Prime farmland: Not prime farmland

NnA—Noboco-Goldsboro complex, 0 to 2 percent slopes

Setting

Major land resource area: Southern Coastal Plain
Landform: Marine terraces
Position on the landform: Summits
Elevation: 151 to 203 feet

Map Unit Composition

Noboco and similar soils: Typically 70 percent; ranging from about 59 to 81 percent
Goldsboro and similar soils: Typically 26 percent; ranging from about 16 to 36 percent

Typical Profile

Noboco
Surface layer:
0 to 10 inches—dark grayish brown loamy sand
Subsurface layer:
10 to 13 inches—pale brown loamy sand
Subsoil layer:
13 to 34 inches—yellowish brown sandy clay loam
34 to 80 inches—yellowish brown sandy clay loam; gray iron depletions and red and strong brown masses of oxidized iron

Goldsboro
Surface layer:
0 to 8 inches—brown sandy loam
Subsoil layer:
8 to 24 inches—brownish yellow sandy clay loam
24 to 35 inches—brownish yellow sandy clay loam; gray iron depletions and red masses of oxidized iron
35 to 80 inches—gray sandy clay loam; red and brownish yellow masses of oxidized iron

Minor Components

- Rains soils

Soil Properties and Qualities

Available water capacity: Noboco—moderate (about 7.7 inches); Goldsboro—moderate (about 8.4 inches)
Slowest saturated hydraulic conductivity: Noboco—moderately high (about 0.20 in/hr); Goldsboro—moderately high (about 0.57 in/hr)
Drainage class: Noboco—well drained; Goldsboro—moderately well drained
Depth to seasonal high water table: Noboco—about 2.6 to 3.6 feet; Goldsboro—about 1.3 to 2.5 feet
Water table kind: Apparent
Flooding hazard: None
Ponding hazard: None
Shrink-swell potential: Low
Runoff class: Low
Parent material: Fluviomarine deposits

Use and Management Considerations

Cropland
Suitability: Moderately suited to corn, soybeans, and wheat (fig. 8) and well suited to cotton lint, peanuts, and tobacco
- Excessive permeability increases the risk of groundwater contamination.
- Soil crusting decreases water infiltration and interferes with the emergence of seedlings.

Pasture
Suitability: Well suited to pasture

Figure 8.—**Baled wheat straw in an area of Noboco-Goldsboro complex, 0 to 2 percent slopes. Wheat straw, after grain harvest, is used for landscaping mulch and provides additional income to farmers.**

Woodland

Suitability: Well suited to loblolly pine and poorly suited to southern red oak and sweetgum

- Coarse textured soil layers increase the need for maintenance of haul roads and log landings.
- Coarse textured soil layers may slough, thus reducing the efficiency of mechanical planting equipment.
- The coarseness of the soil may reduce the traction of wheeled harvest equipment and log trucks.

Building sites

- The seasonal high water table may restrict the period when excavations can be made.

Septic tank absorption fields

- The seasonal high water table greatly limits the absorption and proper treatment of the effluent from conventional septic systems.

Local roads and streets

- Noboco soils are well suited to local roads and streets and Goldsboro soils are moderately suited to local roads and streets.

Interpretative Groups

Land capability class: Noboco—1; Goldsboro—2w
Hydric soil: No
Prime farmland: Prime farmland in all areas

NoA—Norfolk loamy sand, 0 to 2 percent slopes

Setting

Major land resource area: Southern Coastal Plain
Landform: Marine terraces
Position on the landform: Summits
Elevation: 141 to 298 feet

Map Unit Composition

Norfolk and similar soils: Typically 83 percent; ranging from about 72 to 93 percent

Typical Profile

Surface layer:
0 to 7 inches—grayish brown loamy sand
Subsurface layer:
7 to 15 inches—light yellowish brown loamy sand
Subsoil layer:
15 to 63 inches—yellowish brown sandy clay loam
63 to 80 inches—brownish yellow sandy clay loam; gray iron depletions and red masses of oxidized iron

Minor Components

- Noboco soils
- Rains soils
- Bonneau soils
- Orangeburg soils

Soil Properties and Qualities

Available water capacity: Moderate (about 7.6 inches)
Slowest saturated hydraulic conductivity: Moderately high (about 0.57 in/hr)
Drainage class: Well drained
Depth to seasonal high water table: About 4.0 to 5.7 feet
Water table kind: Apparent
Flooding hazard: None
Ponding hazard: None
Shrink-swell potential: Low
Runoff class: Low
Parent material: Fluviomarine deposits

Use and Management Considerations

Cropland
Suitability: Moderately suited to corn, soybeans, and wheat and well suited to cotton lint, peanuts, and tobacco
- Soil crusting decreases water infiltration and interferes with the emergence of seedlings.

Pasture
Suitability: Well suited to pasture

Woodland
Suitability: Moderately suited to loblolly pine and poorly suited to southern red oak and yellow-poplar
- Coarse textured soil layers increase the need for maintenance of haul roads and log landings.

- Coarse textured soil layers may slough, thus reducing the efficiency of mechanical planting equipment.
- The coarseness of the soil may reduce the traction of wheeled harvest equipment and log trucks.

Building sites
- The seasonal high water table may restrict the period when excavations can be made.

Septic tank absorption fields
- The seasonal high water table greatly limits the absorption and proper treatment of the effluent from conventional septic systems.

Local roads and streets
- This soil is well suited to local roads and streets.

Interpretative Groups

Land capability class: 1
Hydric soil: No
Prime farmland: Prime farmland in all areas

NoB—Norfolk loamy sand, 2 to 6 percent slopes

Setting

Major land resource area: Southern Coastal Plain
Landform: Marine terraces
Position on the landform: Shoulders and backslopes
Elevation: 138 to 298 feet

Map Unit Composition

Norfolk and similar soils: Typically 83 percent; ranging from about 72 to 95 percent

Typical Profile

Surface layer:
0 to 7 inches—grayish brown loamy sand
Subsurface layer:
7 to 15 inches—light yellowish brown loamy sand
Subsoil layer:
15 to 63 inches—yellowish brown sandy clay loam
63 to 80 inches—brownish yellow sandy clay loam; gray iron depletions and red masses of oxidized iron

Minor Components

- Noboco soils
- Wagram soils
- Dothan soils

Soil Properties and Qualities

Available water capacity: Moderate (about 7.6 inches)
Slowest saturated hydraulic conductivity: Moderately high (about 0.57 in/hr)
Drainage class: Well drained
Depth to seasonal high water table: About 4.0 to 5.7 feet
Water table kind: Apparent
Flooding hazard: None
Ponding hazard: None

Shrink-swell potential: Low
Runoff class: Low
Parent material: Fluviomarine deposits

Use and Management Considerations

Cropland
Suitability: Moderately suited to corn, soybeans, and wheat and well suited to cotton lint, peanuts, and tobacco
- The slope increases surface runoff, the hazard of erosion, and nutrient loss.
- Soil crusting decreases water infiltration and interferes with the emergence of seedlings.

Pasture
Suitability: Well suited to pasture
- The slope increases surface runoff, the hazard of erosion, and nutrient loss.

Woodland
Suitability: Moderately suited to loblolly pine and poorly suited to southern red oak and yellow-poplar
- Coarse textured soil layers increase the need for maintenance of haul roads and log landings.
- Coarse textured soil layers may slough, thus reducing the efficiency of mechanical planting equipment.
- The coarseness of the soil may reduce the traction of wheeled harvest equipment and log trucks.

Building sites
- The seasonal high water table may restrict the period when excavations can be made.

Septic tank absorption fields
- The seasonal high water table greatly limits the absorption and proper treatment of the effluent from conventional septic systems.

Local roads and streets
- This soil is well suited to local roads and streets.

Interpretative Groups

Land capability class: 2e
Hydric soil: No
Prime farmland: Prime farmland in all areas

OkA—Okeetee fine sandy loam, 0 to 2 percent slopes, rarely flooded

Setting

Major land resource area: Southern Coastal Plain
Landform: Stream terraces
Position on the landform: Treads
Elevation: 121 to 125 feet

Map Unit Composition

Okeetee and similar soils: Typically 80 percent; ranging from about 57 to 100 percent

Typical Profile

Surface layer:
0 to 8 inches—dark gray fine sandy loam
Subsoil layer:
8 to 17 inches—olive yellow clay; gray iron depletions and brownish yellow masses of oxidized iron
17 to 63 inches—gray clay; red and brownish yellow masses of oxidized iron
Substratum layer:
63 to 80 inches—light gray fine sandy loam

Minor Components

- Meggett soils
- Smithboro soils

Soil Properties and Qualities

Available water capacity: Moderate (about 7.2 inches)
Slowest saturated hydraulic conductivity: Moderately low (about 0.06 in/hr)
Drainage class: Somewhat poorly drained
Depth to seasonal high water table: About 0.4 to 1.7 feet
Water table kind: Apparent
Flooding hazard: Rare
Ponding hazard: None
Shrink-swell potential: Moderate
Runoff class: High
Parent material: Alluvium

Use and Management Considerations

Cropland
Suitability: Not suited to corn or soybeans
- The high clay content restricts the rooting depth of crops.
- Soil crusting decreases water infiltration and interferes with the emergence of seedlings.
- The seasonal high water table restricts equipment operation, decreases the viability of crops, and interferes with the planting and harvesting of crops.

Pasture
Suitability: Well suited to pasture
- The seasonal high water table can affect equipment use, grazing patterns, and the viability of grass and legume species.

Woodland
Suitability: Well suited to loblolly pine and poorly suited to southern red oak and sweetgum
- This soil is well suited to roads and landings.
- Soil wetness may limit the use of the soil by log trucks.
- The stickiness of the soil reduces the efficiency of mechanical planting equipment.
- The stickiness of the soil restricts the use of equipment for site preparation to drier periods.

Building sites
- Flooding makes this soil unsuited to building site development.

Septic tank absorption fields
- The seasonal high water table greatly limits the absorption and proper treatment of the effluent from conventional septic systems.

- The restricted permeability of the soil limits the absorption and proper treatment of the effluent from conventional septic systems.

Local roads and streets
- This soil is not suited to local roads and streets.
- The seasonal high water table affects the ease of excavation and grading and reduces the bearing capacity of the soil.
- Shrinking and swelling restrict the use of the soil as base material for local roads and streets.
- The low soil strength is unfavorable for supporting heavy loads.

Interpretative Groups

Land capability class: 3w
Hydric soil: No
Prime farmland: Not prime farmland

OrA—Orangeburg loamy sand, 0 to 2 percent slopes

Setting

Major land resource area: Southern Coastal Plain
Landform: Marine terraces
Position on the landform: Summits
Elevation: 210 to 351 feet

Map Unit Composition

Orangeburg and similar soils: Typically 90 percent; ranging from about 73 to 100 percent

Typical Profile

Surface layer:
0 to 10 inches—dark yellowish brown loamy sand
Subsoil layer:
10 to 19 inches—yellowish red sandy clay loam
19 to 80 inches—red clay loam; common brownish yellow mottles

Minor Components

- Wagram soils
- Lucy soils
- Faceville soils
- Thursa soils

Soil Properties and Qualities

Available water capacity: Moderate (about 6.7 inches)
Slowest saturated hydraulic conductivity: Moderately high (about 0.20 in/hr)
Drainage class: Well drained
Depth to seasonal high water table: More than 6.0 feet
Flooding hazard: None
Ponding hazard: None
Shrink-swell potential: Low
Runoff class: Low
Parent material: Fluviomarine deposits

Use and Management Considerations

Cropland

Suitability: Moderately suited to corn, soybeans, and wheat and well suited to cotton lint, peanuts (fig. 9), and tobacco

- Soil crusting decreases water infiltration and interferes with the emergence of seedlings.

Pasture

Suitability: Well suited to pasture

Woodland

Suitability: Well suited to loblolly pine

- Coarse textured soil layers increase the need for maintenance of haul roads and log landings.
- Coarse textured soil layers may slough, thus reducing the efficiency of mechanical planting equipment.
- The coarseness of the soil may reduce the traction of wheeled harvest equipment and log trucks.
- The stickiness of the soil reduces the efficiency of mechanical planting equipment.

Building sites

- This soil is well suited to building sites.

Septic tank absorption fields

- This soil is well suited to septic tank absorption fields.

Local roads and streets

- This soil is moderately suited to local roads and streets.
- The low soil strength is unfavorable for supporting heavy loads.

Figure 9.—Peanuts in an area of Orangeburg loamy sand, 0 to 2 percent slopes. This soil is well suited to the production of peanuts.

Interpretative Groups

Land capability class: 1
Hydric soil: No
Prime farmland: Prime farmland in all areas

OrB—Orangeburg loamy sand, 2 to 6 percent slopes

Setting

Major land resource area: Southern Coastal Plain
Landform: Marine terraces
Position on the landform: Shoulders and backslopes
Elevation: 210 to 351 feet

Map Unit Composition

Orangeburg and similar soils: Typically 90 percent; ranging from about 73 to 100 percent

Typical Profile

Surface layer:
0 to 10 inches—dark yellowish brown loamy sand
Subsoil layer:
10 to 19 inches—yellowish red sandy clay loam
19 to 80 inches—red clay loam; common brownish yellow mottles

Minor Components

- Norfolk soils
- Bonneau soils

Soil Properties and Qualities

Available water capacity: Moderate (about 6.7 inches)
Slowest saturated hydraulic conductivity: Moderately high (about 0.20 in/hr)
Drainage class: Well drained
Depth to seasonal high water table: More than 6.0 feet
Flooding hazard: None
Ponding hazard: None
Shrink-swell potential: Low
Runoff class: Low
Parent material: Fluviomarine deposits

Use and Management Considerations

Cropland
Suitability: Moderately suited to corn, soybeans, and wheat and well suited to cotton lint, peanuts, and tobacco
- The slope increases surface runoff, the hazard of erosion, and nutrient loss.
- Soil crusting decreases water infiltration and interferes with the emergence of seedlings.

Pasture
Suitability: Well suited to pasture
- The slope increases surface runoff, the hazard of erosion, and nutrient loss.

Woodland
Suitability: Moderately suited to loblolly pine

- Coarse textured soil layers increase the need for maintenance of haul roads and log landings.
- Coarse textured soil layers may slough, thus reducing the efficiency of mechanical planting equipment.
- The coarseness of the soil may reduce the traction of wheeled harvest equipment and log trucks.
- The stickiness of the soil reduces the efficiency of mechanical planting equipment.

Building sites
- This soil is well suited to building sites.

Septic tank absorption fields
- This soil is well suited to septic tank absorption fields.

Local roads and streets
- This soil is moderately suited to local roads and streets.
- The low soil strength is unfavorable for supporting heavy loads.

Interpretative Groups

Land capability class: 2e
Hydric soil: No
Prime farmland: Prime farmland in all areas

OsB2—Orangeburg sandy loam, 2 to 6 percent slopes, moderately eroded

Setting

Major land resource area: Southern Coastal Plain
Landform: Marine terraces
Position on the landform: Shoulders and backslopes
Elevation: 210 to 351 feet

Map Unit Composition

Orangeburg and similar soils: Typically 84 percent; ranging from about 71 to 97 percent

Typical Profile

Surface layer:
0 to 6 inches—brown sandy loam
Subsoil layer:
6 to 19 inches—yellowish red sandy clay loam
19 to 80 inches—red clay loam; common brownish yellow mottles

Minor Components

- Noboco soils
- Nankin soils

Soil Properties and Qualities

Available water capacity: Moderate (about 7.1 inches)
Slowest saturated hydraulic conductivity: Moderately high (about 0.20 in/hr)
Drainage class: Well drained
Depth to seasonal high water table: More than 6.0 feet
Flooding hazard: None
Ponding hazard: None

Shrink-swell potential: Low
Runoff class: Low
Parent material: Fluviomarine deposits

Use and Management Considerations

Cropland
Suitability: Moderately suited to corn, soybeans, wheat, and tobacco and well suited to cotton lint and peanuts
- The slope increases surface runoff, the hazard of erosion, and nutrient loss.
- Erosion has removed part of the surface soil, and the remaining surface soil is less productive and more difficult to manage.
- Soil crusting decreases water infiltration and interferes with the emergence of seedlings.

Pasture
Suitability: Well suited to pasture
- The slope increases surface runoff, the hazard of erosion, and nutrient loss.

Woodland
Suitability: Moderately suited to loblolly pine
- This soil is well suited to roads and landings.
- The stickiness of the soil reduces the efficiency of mechanical planting equipment.

Building sites
- This soil is well suited to building sites.

Septic tank absorption fields
- This soil is well suited to septic tank absorption fields.

Local roads and streets
- This soil is moderately suited to local roads and streets.
- The low soil strength is unfavorable for supporting heavy loads.

Interpretative Groups

Land capability class: 3e
Hydric soil: No
Prime farmland: Not prime farmland

PaA—Paxville coarse sandy loam, 0 to 2 percent slopes, occasionally flooded

Setting

Major land resource area: Southern Coastal Plain
Landform: Stream terraces
Position on the landform: Treads
Elevation: 154 to 190 feet

Map Unit Composition

Paxville and similar soils: Typically 80 percent; ranging from about 65 to 95 percent

Typical Profile

Surface layer:
0 to 13 inches—black coarse sandy loam
Subsoil layer:
13 to 48 inches—dark gray sandy clay loam; brownish yellow masses of oxidized iron

Substratum layer:
48 to 80 inches—grayish brown loamy coarse sand

Minor Components

- Myatt soils
- Lumbee soils

Soil Properties and Qualities

Available water capacity: Moderate (about 7.6 inches)
Slowest saturated hydraulic conductivity: Moderately high (about 0.57 in/hr)
Drainage class: Very poorly drained
Depth to seasonal high water table: At the surface
Water table kind: Apparent
Flooding hazard: Occasional
Ponding hazard: None
Shrink-swell potential: Low
Runoff class: Low
Parent material: Alluvium

Use and Management Considerations

Cropland
Suitability: Not suited to cropland
- Excessive permeability increases the risk of groundwater contamination.

Pasture
Suitability: Well suited to pasture
- Flooding may damage pastures.
- The seasonal high water table can affect equipment use, grazing patterns, and the viability of grass and legume species.

Woodland
Suitability: Well suited to loblolly pine, yellow-poplar, and sweetgum
- Flooding may result in damage to haul roads.
- Coarse textured soil layers increase the need for maintenance of haul roads and log landings.
- Flooding restricts the safe use of roads by log trucks.
- Soil wetness may limit the use of the soil by log trucks.
- Coarse textured soil layers may slough, thus reducing the efficiency of mechanical planting equipment.
- The coarseness of the soil may reduce the traction of wheeled harvest equipment and log trucks.

Building sites
- Flooding makes this soil unsuited to building site development.

Septic tank absorption fields
- Flooding makes this soil unsuited to septic tank absorption fields.
- The seasonal high water table makes this soil unsuited to conventional septic tank absorption fields.

Local roads and streets
- This soil is not suited to local roads and streets.
- Flooding may damage local roads and streets.
- The seasonal high water table affects the ease of excavation and grading and reduces the bearing capacity of the soil.

Interpretative Groups

Land capability class: 6w
Hydric soil: Yes
Prime farmland: Not prime farmland

PeA—Pelion loamy sand, 0 to 2 percent slopes

Setting

Major land resource area: Southern Coastal Plain
Landform: Marine terraces
Position on the landform: Summits
Elevation: 216 to 308 feet

Map Unit Composition

Pelion and similar soils: Typically 83 percent; ranging from about 72 to 95 percent

Typical Profile

Surface layer:
0 to 8 inches—dark grayish brown loamy sand
Subsoil layer:
8 to 24 inches—light yellowish brown sandy clay loam; light brownish gray iron depletions and reddish yellow masses of oxidized iron
24 to 52 inches—light gray clay loam; yellow masses of oxidized iron
Substratum layer:
52 to 80 inches—yellow sandy loam; light gray iron depletions

Minor Components

- Ailey soils
- Vaucluse soils
- Barnwell soils
- Myatt soils

Soil Properties and Qualities

Available water capacity: Moderate (about 7.8 inches)
Slowest saturated hydraulic conductivity: Moderately high (about 0.20 in/hr)
Drainage class: Moderately well drained
Depth to seasonal high water table: About 1.0 to 2.5 feet
Water table kind: Perched
Flooding hazard: None
Ponding hazard: None
Shrink-swell potential: Low
Runoff class: Low
Parent material: Fluviomarine deposits

Use and Management Considerations

Cropland
Suitability: Not suited to corn, cotton lint, or soybeans
- Soil crusting decreases water infiltration and interferes with the emergence of seedlings.
- The seasonal high water table restricts equipment operation, decreases the viability of crops, and interferes with the planting and harvesting of crops.

Pasture
Suitability: Well suited to pasture

Woodland
Suitability: Moderately suited to loblolly pine
- Coarse textured soil layers increase the need for maintenance of haul roads and log landings.
- Coarse textured soil layers may slough, thus reducing the efficiency of mechanical planting equipment.
- The coarseness of the soil may reduce the traction of wheeled harvest equipment and log trucks.
- The stickiness of the soil reduces the efficiency of mechanical planting equipment.

Building sites
- The seasonal high water table may restrict the period when excavations can be made.

Septic tank absorption fields
- The seasonal high water table greatly limits the absorption and proper treatment of the effluent from conventional septic systems.
- The restricted permeability of the soil limits the absorption and proper treatment of the effluent from conventional septic systems.

Local roads and streets
- This soil is moderately suited to local roads and streets.
- The seasonal high water table affects the ease of excavation and grading and reduces the bearing capacity of the soil.
- The low soil strength is unfavorable for supporting heavy loads.

Interpretative Groups

Land capability class: 2w
Hydric soil: No
Prime farmland: Not prime farmland

PeB—Pelion loamy sand, 2 to 6 percent slopes

Setting

Major land resource area: Southern Coastal Plain
Landform: Marine terraces
Position on the landform: Backslopes and shoulders
Elevation: 266 to 321 feet

Map Unit Composition

Pelion and similar soils: Typically 80 percent; ranging from about 57 to 100 percent

Typical Profile

Surface layer:
0 to 8 inches—dark grayish brown loamy sand
Subsoil layer:
8 to 24 inches—light yellowish brown sandy clay loam; light brownish gray iron depletions and reddish yellow masses of oxidized iron
24 to 52 inches—light gray clay loam; yellow masses of oxidized iron
Substratum layer:
52 to 80 inches—yellow sandy loam; light gray iron depletions

Minor Components

- Barnwell soils
- Ailey soils

Soil Properties and Qualities

Available water capacity: Moderate (about 7.7 inches)
Slowest saturated hydraulic conductivity: Moderately high (about 0.20 in/hr)
Drainage class: Moderately well drained
Depth to seasonal high water table: About 1.6 to 2.5 feet
Water table kind: Perched
Flooding hazard: None
Ponding hazard: None
Shrink-swell potential: Low
Runoff class: Low
Parent material: Fluviomarine deposits

Use and Management Considerations

Cropland
Suitability: Not suited to corn, cotton lint, or soybeans
- The slope increases surface runoff, the hazard of erosion, and nutrient loss.
- Soil crusting decreases water infiltration and interferes with the emergence of seedlings.

Pasture
Suitability: Well suited to pasture
- The slope increases surface runoff, the hazard of erosion, and nutrient loss.

Woodland
Suitability: Moderately suited to loblolly pine
- Coarse textured soil layers increase the need for maintenance of haul roads and log landings.
- Coarse textured soil layers may slough, thus reducing the efficiency of mechanical planting equipment.
- The coarseness of the soil may reduce the traction of wheeled harvest equipment and log trucks.
- The stickiness of the soil reduces the efficiency of mechanical planting equipment.

Building sites
- The seasonal high water table may restrict the period when excavations can be made.

Septic tank absorption fields
- The seasonal high water table greatly limits the absorption and proper treatment of the effluent from conventional septic systems.
- The restricted permeability of the soil limits the absorption and proper treatment of the effluent from conventional septic systems.

Local roads and streets
- This soil is moderately suited to local roads and streets.
- The seasonal high water table affects the ease of excavation and grading and reduces the bearing capacity of the soil.
- The low soil strength is unfavorable for supporting heavy loads.

Interpretative Groups

Land capability class: 2e
Hydric soil: No
Prime farmland: Not prime farmland

PtD—Pits-Udorthents, loamy substratum complex, 0 to 15 percent slopes

Setting

Major land resource area: Southern Coastal Plain
Landform: Marine terraces
Position on the landform: Summits, shoulders, and backslopes
Elevation: 128 to 430 feet

Map Unit Composition

Pits and similar soils: Typically 60 percent; ranging from about 30 to 85 percent
Udorthents and similar soils: Typically 40 percent; ranging from about 40 to 75 percent

Typical Profile

This map unit consists of borrow pits, which are areas where all the original soils and much of the underlying layers have been removed for use as fill material or construction aggregate. Cuts are 3 to 25 feet deep and have steep side slopes on one or more sides. The surface is generally uneven and many areas have exposed bedrock. Plant growth in these areas generally is poor. Most of the areas are naturally reseeded in wild grasses, weeds, shortleaf pine, and loblolly pine. Erosion is a severe hazard in unstabilized areas. Major reclamation generally is necessary to prepare these areas for the economic production of plants or development for other purposes. A typical pedon has not been selected.

Use and Management Considerations

Note: Onsite investigation is needed to determine the suitability for specific uses.

Cropland
Suitability: Not suited to cropland

Pasture
Suitability: Not suited to pasture

Woodland
- The slope may restrict the use of some mechanical planting equipment.

Building sites
- The slope influences the use of machinery and the amount of excavation required.

Septic tank absorption fields
- The slope limits the proper treatment of effluent from conventional septic systems.

Local roads and streets
- The slope makes it difficult to design local roads and streets.

Interpretative Groups

Land capability class: Pits—8; Udorthents—8
Hydric soil: No
Prime farmland: Not prime farmland

RaA—Rains sandy loam, 0 to 2 percent slopes

Setting

Major land resource area: Southern Coastal Plain
Landform: Carolina Bays and drainageways

Position on the landform: Depressions
Elevation: 144 to 200 feet

Map Unit Composition

Rains and similar soils: Typically 89 percent; ranging from about 82 to 96 percent

Typical Profile

Surface layer:
0 to 7 inches—very dark gray sandy loam
Subsurface layer:
7 to 12 inches—light brownish gray sandy loam
Subsoil layer:
12 to 80 inches—gray sandy clay loam; yellowish brown and red masses of oxidized iron

Minor Components

- Coxville soils
- Myatt soils

Soil Properties and Qualities

Available water capacity: Moderate (about 8.3 inches)
Slowest saturated hydraulic conductivity: Moderately high (about 0.20 in/hr)
Drainage class: Poorly drained
Depth to seasonal high water table: About 0.3 to 1.3 feet (fig. 10)
Water table kind: Apparent
Flooding hazard: None
Ponding hazard: None

Figure 10.—Soil rutting in an area of Rains sandy loam, 0 to 2 percent slopes. The high seasonal water table in this soil can cause rutting during harvest. Rutting degrades the soil structure and reduces the infiltration of water.

Shrink-swell potential: Low
Runoff class: Low
Parent material: Fluviomarine deposits

Use and Management Considerations

Cropland
Suitability: Moderately suited to corn, cotton lint, and soybeans and well suited to tobacco
- The seasonal high water table restricts equipment operation, decreases the viability of crops, and interferes with the planting and harvesting of crops.

Pasture
Suitability: Well suited to pasture
- The seasonal high water table can affect equipment use, grazing patterns, and the viability of grass and legume species.

Woodland
Suitability: Well suited to loblolly pine and poorly suited to sweetgum
- This soil is well suited to roads and landings.
- Soil wetness may limit the use of the soil by log trucks.
- The stickiness of the soil reduces the efficiency of mechanical planting equipment.

Building sites
- The seasonal high water table may restrict the period when excavations can be made.

Septic tank absorption fields
- The seasonal high water table greatly limits the absorption and proper treatment of the effluent from conventional septic systems.

Local roads and streets
- This soil is not suited to local roads and streets.
- The seasonal high water table affects the ease of excavation and grading and reduces the bearing capacity of the soil.

Interpretative Groups

Land capability class: 3w
Hydric soil: Yes
Prime farmland: Not prime farmland

SmA—Smithboro sandy loam, 0 to 2 percent slopes

Setting

Major land resource area: Southern Coastal Plain
Landform: Marine terraces
Position on the landform: Summits
Elevation: 174 to 194 feet

Map Unit Composition

Smithboro and similar soils: Typically 80 percent; ranging from about 70 to 89 percent

Typical Profile

Surface layer:
0 to 3 inches—dark gray sandy loam

Subsurface layer:
3 to 5 inches—light brownish gray sandy loam; gray iron depletions and brownish yellow masses of oxidized iron
Subsoil layer:
5 to 12 inches—light yellowish brown clay loam; light brownish gray iron depletions and reddish yellow masses of oxidized iron
12 to 80 inches—light brownish gray clay; light brownish gray and brownish yellow masses of oxidized iron

Minor Components

- Coxville soils
- Lynchburg soils

Soil Properties and Qualities

Available water capacity: Moderate (about 7.3 inches)
Slowest saturated hydraulic conductivity: Moderately low (about 0.06 in/hr)
Drainage class: Somewhat poorly drained
Depth to seasonal high water table: About 0.5 to 0.9 foot
Water table kind: Apparent
Flooding hazard: None
Ponding hazard: None
Shrink-swell potential: Moderate
Runoff class: High
Parent material: Fluviomarine deposits

Use and Management Considerations

Cropland
Suitability: Poorly suited to corn and soybeans
- The high clay content restricts the rooting depth of crops.
- The seasonal high water table restricts equipment operation, decreases the viability of crops, and interferes with the planting and harvesting of crops.

Pasture
Suitability: Well suited to pasture
- The seasonal high water table can affect equipment use, grazing patterns, and the viability of grass and legume species.

Woodland
Suitability: Well suited to loblolly pine and sweetgum
- The low soil strength interferes with the construction of haul roads and log landings.
- Soil wetness may limit the use of the soil by log trucks.
- The stickiness of the soil reduces the efficiency of mechanical planting equipment.

Building sites
- The seasonal high water table may restrict the period when excavations can be made.
- The high content of clay in the subsurface layer increases the difficulty of digging, filling, and compacting the soil material in shallow excavations.

Septic tank absorption fields
- The seasonal high water table greatly limits the absorption and proper treatment of the effluent from conventional septic systems.
- The restricted permeability of the soil limits the absorption and proper treatment of the effluent from conventional septic systems.

Local roads and streets
- This soil is not suited to local roads and streets.

- The seasonal high water table affects the ease of excavation and grading and reduces the bearing capacity of the soil.
- Shrinking and swelling restrict the use of the soil as base material for local roads and streets.
- The low soil strength is unfavorable for supporting heavy loads.

Interpretative Groups

Land capability class: 3w
Hydric soil: No
Prime farmland: Not prime farmland

StA—State-Eunola complex, 0 to 2 percent slopes, rarely flooded

Setting

Major land resource area: Southern Coastal Plain
Landform: Stream terraces
Position on the landform: Treads
Elevation: 121 to 213 feet

Map Unit Composition

State and similar soils: Typically 71 percent; ranging from about 60 to 82 percent
Eunola and similar soils: Typically 18 percent; ranging from about 8 to 27 percent

Typical Profile

State
Surface layer:
0 to 8 inches—brown loamy sand
Subsurface layer:
8 to 14 inches—light yellowish brown loamy sand
Subsoil layer:
14 to 29 inches—yellowish brown sandy clay loam
29 to 49 inches—olive yellow sandy loam
49 to 55 inches—olive yellow sandy loam; light gray iron depletions and strong brown masses of oxidized iron
Substratum layer:
55 to 80 inches—yellowish brown loamy coarse sand; light gray iron depletions and strong brown masses of oxidized iron

Eunola
Surface layer:
0 to 7 inches—dark gray sandy loam
Subsurface layer:
7 to 10 inches—light yellowish brown sandy loam
Subsoil layer:
10 to 38 inches—brownish yellow sandy clay loam; light gray iron depletions and yellowish brown masses of oxidized iron
38 to 55 inches—light gray sandy clay loam; strong brown and very pale brown masses of oxidized iron
Substratum layer:
55 to 80 inches—light gray sandy loam; very pale brown masses of oxidized iron

Minor Components

- Johns soils
- Kalmia soils
- Myatt soils
- Alaga soils

Soil Properties and Qualities

Available water capacity: State—moderate (about 6.5 inches); Eunola—moderate (about 8.0 inches)
Slowest saturated hydraulic conductivity: State—moderately high (about 0.57 in/hr); Eunola—moderately high (about 0.20 in/hr)
Drainage class: State—well drained; Eunola—moderately well drained
Depth to seasonal high water table: State—about 3.3 to 4.3 feet; Eunola—about 0.9 to 2.8 feet
Water table kind: Apparent
Flooding hazard: Rare
Ponding hazard: None
Shrink-swell potential: Low
Runoff class: Low
Parent material: Alluvium

Use and Management Considerations

Cropland
Suitability: Moderately suited to corn, soybeans, and wheat and well suited to cotton lint, peanuts, tobacco, and grass-legume hay
- Soil crusting decreases water infiltration and interferes with the emergence of seedlings.

Pasture
Suitability: Well suited to pasture

Woodland
Suitability: Poorly suited to loblolly pine and southern red oak
- Coarse textured soil layers increase the need for maintenance of haul roads and log landings.
- Coarse textured soil layers may slough, thus reducing the efficiency of mechanical planting equipment.
- The coarseness of the soil may reduce the traction of wheeled harvest equipment and log trucks.

Building sites
- Flooding makes these soils unsuited to building site development.

Septic tank absorption fields
- The seasonal high water table greatly limits the absorption and proper treatment of the effluent from conventional septic systems.
- The excessive permeability limits the proper treatment of the effluent from conventional septic systems and may pollute the water table.

Local roads and streets
- These soils are moderately suited to local roads and streets.

Interpretative Groups

Land capability class: State—1; Eunola—2w
Hydric soil: No
Prime farmland: Prime farmland in all areas

ThA—Thursa loamy sand, 0 to 2 percent slopes

Setting

Major land resource area: Southern Coastal Plain
Landform: Marine terraces
Position on the landform: Summits
Elevation: 220 to 328 feet

Map Unit Composition

Thursa and similar soils: Typically 80 percent; ranging from about 68 to 92 percent

Typical Profile

Surface layer:
0 to 10 inches—brown loamy sand
Subsoil layer:
10 to 35 inches—yellowish brown sandy clay loam
35 to 50 inches—yellowish red sandy clay; common yellowish brown mottles
50 to 80 inches—red clay; common yellowish brown mottles

Minor Components

- Norfolk soils
- Orangeburg soils
- Lucy soils

Soil Properties and Qualities

Available water capacity: Moderate (about 7.1 inches)
Slowest saturated hydraulic conductivity: Moderately high (about 0.20 in/hr)
Drainage class: Well drained
Depth to seasonal high water table: More than 6.0 feet
Flooding hazard: None
Ponding hazard: None
Shrink-swell potential: Low
Runoff class: Low
Parent material: Fluviomarine deposits

Use and Management Considerations

Cropland
Suitability: Moderately suited to corn, soybeans, and wheat and well suited to cotton lint, peanuts, and tobacco
- The high clay content restricts the rooting depth of crops.
- Soil crusting decreases water infiltration and interferes with the emergence of seedlings.

Pasture
Suitability: Well suited to pasture

Woodland
Suitability: Well suited to loblolly pine
- Coarse textured soil layers increase the need for maintenance of haul roads and log landings.
- Coarse textured soil layers may slough, thus reducing the efficiency of mechanical planting equipment.

- The coarseness of the soil may reduce the traction of wheeled harvest equipment and log trucks.

Building sites
- The high content of clay in the subsurface layer increases the difficulty of digging, filling, and compacting the soil material in shallow excavations.

Septic tank absorption fields
- This soil is well suited to septic tank absorption fields.

Local roads and streets
- This soil is well suited to local roads and streets.

Interpretative Groups

Land capability class: 1
Hydric soil: No
Prime farmland: Prime farmland in all areas

ThB—Thursa loamy sand, 2 to 6 percent slopes

Setting

Major land resource area: Southern Coastal Plain
Landform: Marine terraces
Position on the landform: Backslopes, shoulders, and summits
Elevation: 272 to 325 feet

Map Unit Composition

Thursa and similar soils: Typically 83 percent; ranging from about 72 to 93 percent

Typical Profile

Surface layer:
0 to 10 inches—brown loamy sand
Subsoil layer:
10 to 35 inches—yellowish brown sandy clay loam
35 to 50 inches—yellowish red sandy clay; common yellowish brown mottles
50 to 80 inches—red clay; common yellowish brown mottles

Minor Components

- Nankin soils
- Wagram soils
- Lynchburg soils
- Faceville soils
- Norfolk soils

Soil Properties and Qualities

Available water capacity: Moderate (about 7.2 inches)
Slowest saturated hydraulic conductivity: Moderately high (about 0.20 in/hr)
Drainage class: Well drained
Depth to seasonal high water table: More than 6.0 feet
Flooding hazard: None
Ponding hazard: None
Shrink-swell potential: Low
Runoff class: Low
Parent material: Fluviomarine deposits

Use and Management Considerations

Cropland
Suitability: Moderately suited to corn, soybeans, and wheat and well suited to cotton lint, peanuts, and tobacco
- The slope increases surface runoff, the hazard of erosion, and nutrient loss.
- The high clay content restricts the rooting depth of crops.
- Soil crusting decreases water infiltration and interferes with the emergence of seedlings.

Pasture
Suitability: Well suited to pasture
- The slope increases surface runoff, the hazard of erosion, and nutrient loss.

Woodland
Suitability: Moderately suited to loblolly pine
- Coarse textured soil layers increase the need for maintenance of haul roads and log landings.
- Coarse textured soil layers may slough, thus reducing the efficiency of mechanical planting equipment.
- The coarseness of the soil may reduce the traction of wheeled harvest equipment and log trucks.
- The stickiness of the soil reduces the efficiency of mechanical planting equipment.

Building sites
- The high content of clay in the subsurface layer increases the difficulty of digging, filling, and compacting the soil material in shallow excavations.

Septic tank absorption fields
- This soil is well suited to septic tank absorption fields.

Local roads and streets
- This soil is well suited to local roads and streets.

Interpretative Groups

Land capability class: 2e
Hydric soil: No
Prime farmland: Prime farmland in all areas

TrB—Troup sand, 0 to 6 percent slopes

Setting

Major land resource area: Southern Coastal Plain and Carolina and Georgia Sand Hills
Landform: Marine terraces
Position on the landform: Summits and shoulders
Elevation: 200 to 344 feet

Map Unit Composition

Troup and similar soils: Typically 71 percent; ranging from about 61 to 81 percent

Typical Profile

Surface layer:
0 to 3 inches—dark grayish brown sand
Subsurface layer:
3 to 46 inches—very pale brown sand

Subsoil layer:
46 to 80 inches—strong brown sandy clay loam

Minor Components

- Lucknow soils
- Wagram soils
- Candor soils
- Lucy soils
- Ailey soils
- Lakeland soils
- Fuquay soils

Soil Properties and Qualities

Available water capacity: Low (about 4.0 inches)
Slowest saturated hydraulic conductivity: Moderately high (about 0.57 in/hr)
Drainage class: Somewhat excessively drained
Depth to seasonal high water table: More than 6.0 feet
Flooding hazard: None
Ponding hazard: None
Shrink-swell potential: Low
Runoff class: Very low
Parent material: Fluviomarine deposits

Use and Management Considerations

Cropland
Suitability: Not suited to corn, cotton lint, soybeans, or peanuts
- The slope increases surface runoff, the hazard of erosion, and nutrient loss.
- The limited available water capacity may cause plants to suffer from moisture stress.
- Soil crusting decreases water infiltration and interferes with the emergence of seedlings.

Pasture
Suitability: Well suited to pasture
- The slope increases surface runoff, the hazard of erosion, and nutrient loss.
- The limited available water capacity may cause plants to suffer from moisture stress during the drier summer months.

Woodland
Suitability: Moderately suited to loblolly pine
- Coarse textured soil layers increase the need for maintenance of haul roads and log landings.
- Coarse textured soil layers may slough, thus reducing the efficiency of mechanical planting equipment.
- The coarseness of the soil may reduce the traction of wheeled harvest equipment and log trucks.

Building sites
- The high content of sand or gravel in the soil increases sloughing and causes cutbanks to be more susceptible to caving.

Septic tank absorption fields
- The excessive permeability limits the proper treatment of the effluent from conventional septic systems and may pollute the water table.

Local roads and streets
- This soil is well suited to local roads and streets.

Interpretative Groups

Land capability class: 3s
Hydric soil: No
Prime farmland: Not prime farmland

TrC—Troup sand, 6 to 10 percent slopes

Setting

Major land resource area: Southern Coastal Plain and Carolina and Georgia Sand Hills
Landform: Marine terraces
Position on the landform: Shoulders, summits, and backslopes
Elevation: 118 to 351 feet

Map Unit Composition

Troup and similar soils: Typically 85 percent; ranging from about 71 to 99 percent

Typical Profile

Surface layer:
0 to 3 inches—dark grayish brown sand
Subsurface layer:
3 to 46 inches—very pale brown sand
Subsoil layer:
46 to 80 inches—strong brown sandy clay loam

Minor Components

- Lucknow soils
- Wagram soils

Soil Properties and Qualities

Available water capacity: Low (about 4.0 inches)
Slowest saturated hydraulic conductivity: Moderately high (about 0.57 in/hr)
Drainage class: Somewhat excessively drained
Depth to seasonal high water table: More than 6.0 feet
Flooding hazard: None
Ponding hazard: None
Shrink-swell potential: Low
Runoff class: Low
Parent material: Fluviomarine deposits

Use and Management Considerations

Cropland
Suitability: Not suited to corn, cotton lint, soybeans, or peanuts
- The slope increases surface runoff, the hazard of erosion, and nutrient loss.
- The limited available water capacity may cause plants to suffer from moisture stress.
- Soil crusting decreases water infiltration and interferes with the emergence of seedlings.

Pasture
Suitability: Well suited to pasture
- The slope increases surface runoff, the hazard of erosion, and nutrient loss.

- The limited available water capacity may cause plants to suffer from moisture stress during the drier summer months.

Woodland
Suitability: Moderately suited to loblolly pine
- The slope creates unsafe operating conditions and reduces the operating efficiency of log trucks.
- The slope may restrict the use of some mechanical planting equipment.
- Coarse textured soil layers may slough, thus reducing the efficiency of mechanical planting equipment.
- The coarseness of the soil may reduce the traction of wheeled harvest equipment and log trucks.

Building sites
- The slope influences the use of machinery and the amount of excavation required.
- The high content of sand or gravel in the soil increases sloughing and causes cutbanks to be more susceptible to caving.

Septic tank absorption fields
- The excessive permeability of the soil limits the proper treatment of the effluent from conventional septic systems and may pollute the water table.
- The slope limits the proper treatment of effluent from conventional septic systems.

Local roads and streets
- This soil is well suited to local roads and streets.

Interpretative Groups

Land capability class: 4s
Hydric soil: No
Prime farmland: Not prime farmland

UdD—Udorthents, refuse substratum-Pits complex, 0 to 15 percent slopes

Setting

Major land resource area: Southern Coastal Plain
Landform: Marine terraces
Position on the landform: Summits, shoulders, and backslopes
Elevation: 197 to 246 feet

Map Unit Composition

Udorthents, refuse, and similar soils: Typically 55 percent; ranging from about 40 to 75 percent
Pits and similar soils: Typically 45 percent; ranging from about 30 to 85 percent

Typical Profile

The Udorthents, refuse substratum, portion of this map unit consists of earthy material transported from the Pits portion of the map unit and refuse. The Pits portion of this map unit consists of open excavations from which the original soil and underlying material have been removed for use at another location. Typically, the remaining material consists of strata of sand, gravel, and mixed earthy materials. This map unit also consists of areas of undisturbed soils. A typical pedon has not been selected.

Use and Management Considerations

Note: Onsite investigation is needed to determine the suitability for specific uses.

Cropland
Suitability: Not suited to cropland

Pasture
Suitability: Not suited to pasture

Woodland
Suitability: Not suited to woodland
- The slope may restrict the use of some mechanical planting equipment.

Building sites
- The slope influences the use of machinery and the amount of excavation required.

Septic tank absorption fields
- The slope limits the proper treatment of effluent from conventional septic systems.

Local roads and streets
- The slope makes it difficult to design local roads and streets.

Interpretative Groups

Land capability class: Udorthents—8; Pits—8
Hydric soil: No
Prime farmland: Not prime farmland

VaC—Vaucluse loamy sand, 6 to 10 percent slopes

Setting

Major land resource area: Southern Coastal Plain and Carolina and Georgia Sand Hills
Landform: Marine terraces
Position on the landform: Backslopes and shoulders
Elevation: 230 to 403 feet

Map Unit Composition

Vaucluse and similar soils: Typically 76 percent; ranging from about 61 to 91 percent

Typical Profile

Surface layer:
0 to 2 inches—dark gray loamy sand
Subsurface layer:
2 to 6 inches—brownish yellow loamy sand
Subsoil layer:
6 to 16 inches—yellowish red sandy clay loam
16 to 25 inches—yellowish red sandy clay loam; common brownish yellow mottles
25 to 50 inches—red sandy clay loam
Substratum layer:
50 to 80 inches—reddish yellow loamy sand; common yellow mottles

Minor Components

- Ailey soils
- Troup soils
- Pelion soils
- Johnston soils

Soil Properties and Qualities

Available water capacity: Very low (about 1.9 inches)
Slowest saturated hydraulic conductivity: Low (about 0.02 in/hr)
Drainage class: Well drained
Depth to seasonal high water table: More than 6.0 feet
Flooding hazard: None
Ponding hazard: None
Shrink-swell potential: Low
Runoff class: Medium
Parent material: Fluviomarine deposits

Use and Management Considerations

Cropland
Suitability: Not suited to corn, cotton lint, or soybeans
- The slope increases surface runoff, the hazard of erosion, and nutrient loss.
- The limited available water capacity may cause plants to suffer from moisture stress.
- Soil crusting decreases water infiltration and interferes with the emergence of seedlings.

Pasture
Suitability: Well suited to pasture
- The slope increases surface runoff, the hazard of erosion, and nutrient loss.
- The limited available water capacity may cause plants to suffer from moisture stress during the drier summer months.

Woodland
Suitability: Moderately suited to loblolly pine
- The slope creates unsafe operating conditions and reduces the operating efficiency of log trucks.
- The slope may restrict the use of some mechanical planting equipment.

Building sites
- The slope influences the use of machinery and the amount of excavation required.
- The dense nature of the subsurface layer increases the difficulty of digging and compacting the soil material in shallow excavations.

Septic tank absorption fields
- The restricted permeability of the soil limits the absorption and proper treatment of the effluent from conventional septic systems.
- The slope limits the proper treatment of effluent from conventional septic systems.

Local roads and streets
- This soil is well suited to local roads and streets.

Interpretative Groups

Land capability class: 3e
Hydric soil: No
Prime farmland: Not prime farmland

W—Water

This map unit includes ponds and lakes. This map unit is not assigned any interpretive groups.

WaB—Wagram sand, 0 to 4 percent slopes

Setting

Major land resource area: Southern Coastal Plain
Landform: Marine terraces
Position on the landform: Shoulders and summits
Elevation: 177 to 298 feet

Map Unit Composition

Wagram and similar soils: Typically 86 percent; ranging from about 79 to 93 percent

Typical Profile

Surface layer:
0 to 4 inches—dark grayish brown sand
Subsurface layer:
4 to 33 inches—light yellowish brown sand
Subsoil layer:
33 to 80 inches—brownish yellow sandy clay loam; common strong brown and common yellowish red mottles

Minor Components

- Lucknow soils
- Bonneau soils
- Troup soils
- Norfolk soils

Soil Properties and Qualities

Available water capacity: Low (about 5.1 inches)
Slowest saturated hydraulic conductivity: Moderately high (about 0.57 in/hr)
Drainage class: Well drained
Depth to seasonal high water table: More than 6.0 feet
Flooding hazard: None
Ponding hazard: None
Shrink-swell potential: Low
Runoff class: Low
Parent material: Fluviomarine deposits

Use and Management Considerations

Cropland
Suitability: Poorly suited to corn and not suited to cotton lint, soybeans, peanuts, wheat, or tobacco
- Sandy or coarse textured soil layers accelerate the rate at which plant nutrients are leached.
- Soil crusting decreases water infiltration and interferes with the emergence of seedlings.

Pasture
Suitability: Well suited to pasture

Woodland
Suitability: Moderately suited to loblolly pine
- Coarse textured soil layers increase the need for maintenance of haul roads and log landings.
- Coarse textured soil layers may slough, thus reducing the efficiency of mechanical planting equipment.

- The coarseness of the soil may reduce the traction of wheeled harvest equipment and log trucks.

Building sites
- The high content of sand or gravel in the soil increases sloughing and causes cutbanks to be more susceptible to caving.

Septic tank absorption fields
- The excessive permeability of the soil limits the proper treatment of the effluent from conventional septic systems and may pollute the water table.

Local roads and streets
- This soil is well suited to local roads and streets.

Interpretative Groups

Land capability class: 2s
Hydric soil: No
Prime farmland: Not prime farmland

Use and Management of the Soils

This soil survey is an inventory and evaluation of the soils in the survey area. It can be used to adjust land uses to the limitations and potentials of natural resources and the environment. Also, it can help to prevent soil-related failures in land uses.

In preparing a soil survey, soil scientists, conservationists, engineers, and others collect extensive field data about the nature and behavioral characteristics of the soils. They collect data on erosion, droughtiness, flooding, and other factors that affect various soil uses and management. Field experience and collected data on soil properties and performance are used as a basis in predicting soil behavior.

Information in this section can be used to plan the use and management of soils for crops and pasture; as forestland; as sites for buildings, sanitary facilities, highways and other transportation systems, and parks and other recreational facilities; for agricultural waste management; and as wildlife habitat. It can be used to identify the potentials and limitations of each soil for specific land uses and to help prevent construction failures caused by unfavorable soil properties.

Planners and others using soil survey information can evaluate the effect of specific land uses on productivity and on the environment in all or part of the survey area. The survey can help planners to maintain or create a land use pattern in harmony with the natural soil.

Contractors can use this survey to locate sources of gravel, sand, reclamation material, roadfill, and topsoil. They can use it to identify areas where bedrock, wetness, or very firm soil layers can cause difficulty in excavation.

Health officials, highway officials, engineers, and others may also find this survey useful. The survey can help them plan the safe disposal of wastes and locate sites for pavements, sidewalks, campgrounds, playgrounds, lawns, and trees and shrubs.

Interpretive Ratings

The interpretive tables in this survey rate the soils in the survey area for various uses. Many of the tables identify the limitations that affect specified uses and indicate the severity of those limitations. The ratings in these tables are both verbal and numerical.

Rating Class Terms

Rating classes are expressed in the tables in terms that indicate the extent to which the soils are limited by all of the soil features that affect a specified use or in terms that indicate the suitability of the soils for the use. Thus, the tables may show limitation classes or suitability classes. Terms for the limitation classes are *not limited, somewhat limited,* and *very limited*. The suitability ratings are expressed as *well suited, moderately suited, poorly suited,* and *unsuited* or as *good, fair,* and *poor*.

Numerical Ratings

Numerical ratings in the tables indicate the relative severity of individual limitations. The ratings are shown as decimal fractions ranging from 0.00 to 1.00. They indicate

gradations between the point at which a soil feature has the greatest negative impact on the use and the point at which the soil feature is not a limitation. The limitations appear in order from the most limiting to the least limiting. Thus, if more than one limitation is identified, the most severe limitation is listed first and the least severe one is listed last.

Crops and Pasture

Gene E. Hardee, conservation agronomist, Natural Resources Conservation Service, helped prepare this section.

General management needed for crops and pasture is suggested in this section. The crops and pasture plants best suited to the soils are identified, the system of land capability classification used by the Natural Resources Conservation Service is explained, and the estimated yields of the main crops and pasture plants are listed.

Planners of management systems for individual fields or farms should consider the detailed information given in the description of each soil under the heading “Detailed Soil Map Units.” Specific information can be obtained from the local office of the Natural Resources Conservation Service or the Cooperative Extension Service.

Federal and State regulations require that any areas designated as wetlands cannot be altered without prior approval. Contact the local office of the Natural Resources Conservation Service for identification of hydric soils and potential wetlands.

In 2004, according to the Farm Service Agency, about 146,700 acres in Lee County was used for cropland, pasture (fig. 11), or hayland. Of this, about 125,000 acres was used for field crops, mainly cotton, peanuts, soybeans, corn, wheat, and tobacco and about 500 acres was used for orchards, mainly peaches and pecans. Since 1986, approximately 13,200 acres has been removed from crop production through participation in the Conservation Reserve Program.

Figure 11.—An area of Alpin sand, 0 to 6 percent slopes (foreground), and Norfolk loamy sand, 0 to 2 percent slopes (background), used as a pasture to supply grass to cattle year-round.

Figure 12.—Sunflowers in an area of Norfolk loamy sand, 0 to 2 percent slopes. Sunflowers are a good fall food source for birds.

The principal field crops suited to the soils and climate of Lee County include cotton, peanuts, soybeans, corn, and tobacco. A minor amount of acreage is used for watermelons and grain sorghum.

Wheat and rye are the most common close-growing crops. Oats, barley, pearl millet, and sudangrass can be grown for forage and seed as well. Bicolor and sericea lespedeza are perennial legumes grown for seed, forage, and wildlife habitat. The principal grasses grown for forage are bermudagrass and bahiagrass.

Specialty crops (fig. 12) include vegetables, small fruits, and pecans. Vegetables grown include cantaloupes, field peas, lima beans, okra, squash, sweet corn, tomatoes, collards, turnips, broccoli, and strawberries. Large areas can be adapted to these and other specialty crops, such as blueberries. Deep soils that have good natural drainage, have a moderate or high available water capacity, and warm up early in spring are especially well suited to many vegetables. Crops generally can be planted and harvested early on Dothan, Faceville, Lucy, Noboco, Norfolk, Orangeburg, Wagram, and Suffolk soils. The latest information about specialty crops can be obtained at the local office of the Cooperative Extension Service or the Natural Resources Conservation Service.

The suitability of the soils makes it possible to increase production of food in Lee County. According to the Farm Service Agency, approximately 8,000 acres of potentially good cropland is currently used for pasture. The production of food can be increased by converting this land to cropland and by extending the latest crop production technology to all cropland in the county. This soil survey can greatly facilitate the application of such technology.

Timber is produced on about 114,740 acres. This excludes the acreage enrolled in the Conservation Reserve Program.

Generally, the soils in the county that are well suited to crops and pasture are also suited to urban development. About 1,460 acres in Lee County is urban and built-up land, and the amount of urban and built-up land increases at a rate of about 50 acres

per year. This survey can be used to help make land use decisions that will influence the future role of farming in the county.

Erosion is a major concern on about 30 percent of the land in Lee County. It is a hazard on many of the soils that are used for crops. Water erosion commonly is a hazard on soils that have slopes of more than 2 percent or that have very long slopes of 1 or 2 percent. Soil blowing is a concern on clean-tilled, sandy soils. The main problem is damage to young plants rather than actual plant loss.

Loss of the surface layer through erosion reduces productivity and pollutes streams. Soil productivity is reduced as the surface layer is lost and part of the subsoil is incorporated into the plow layer. Loss of the surface layer is especially damaging on soils that have a clayey subsoil, such as Faceville and Nankin soils, on soils that have a layer in or below the subsoil that limits the depth of the root zone, such as the Barnwell soils, and on soils which have a dense or somewhat brittle layer, such as Cowarts and Vaucluse soils. Erosion also reduces productivity on deep, sandy soils, such as Ailey, Alpin, Blanton, Lucy, Troup, and Wagram soils, because of loss of nutrients and fine soil particles.

Erosion on farmland results in the sedimentation of streams. Erosion control measures minimize the pollution of streams and improve the quality of water for municipal use, for recreation, and for fish and wildlife. In some sloping fields, the original friable surface layer has been lost through erosion; small areas that have clayey or sandy surface layers remain. Seedbed preparation and tillage are difficult on these areas. Such areas are common on the most sloping part of intensively cropped areas of Barnwell, Faceville, Nankin, Noboco, and Orangeburg soils.

Water erosion is best controlled by a combination of structural measures, which remove excess water from the field, and cropping and tillage systems, which provide surface cover and reduce runoff. Diversions and terraces, which reduce the length of the slope, and grassed waterways, which remove excess water from fields, are examples of structural measures. Contour tillage, which reduces the amount and velocity of runoff, and a cropping sequence that includes sod crops in rotation and tillage, which leaves protective residue on the surface, are examples of cropping and tillage systems that reduce runoff and increase the infiltration of water. On livestock farms, which require pasture and hay, including grasses and legumes in the cropping sequence helps to control erosion in sloping areas and provides nitrogen for the crops that follow. Terraces and diversions can effectively control erosion on deep, well drained soils that have uniform slopes, such as Barnwell, Dothan, Faceville, Nankin, Orangeburg, and Thursa soils. These measures tend to concentrate water, however; they are generally not suitable on less stable soils that have a sandy surface layer, such as Ailey, Alaga, Alpin, Candor, Foxworth, Lucy, and Wagram soils. On these soils, effective erosion-control systems generally include contour farming, contour stripcropping, and conservation tillage, which reduce the amount and velocity of runoff and do not concentrate the runoff. Information about erosion-control measures for each kind of soil is available at the local office of the Natural Resources Conservation Service.

Damage to young plants by soil blowing is a major management concern on Autryville, Dothan, Lucy, Norfolk, Noboco, Orangeburg, Thursa, and Wagram soils. The risk of damage is especially high on extensive fields that are not protected by plant cover. Conservation tillage, strips of permanent vegetation, and strips of close-growing crops help to protect sandy soils that are subject to soil blowing.

Wetness is a major concern on about 41 percent of the soils in Lee County. Adequate drainage of cropland and hayland is feasible on only about 65 percent of these soils. Approximately 56 percent of the soils associated with drainage concerns are in wetlands.

A low available water capacity is a limitation on Ailey, Alaga, Alpin, Blanton, Candor, Foxworth, Lakeland, and Troup soils. This limitation can be reduced by crop residue

management, proper crop selection, and irrigation. These soils are well suited to deep-rooted pasture grasses, such as bahiagrass and bermudagrass, and drought-tolerant crops, such as grain sorghum. Because of rapid leaching of nutrients from these soils, frequent and light applications of fertilizer and lime are needed for good growth.

The soils in Lee County are low in natural fertility. Regular applications of lime and fertilizer are needed. Most of the soils naturally are very strongly acid, strongly acid, or moderately acid. They commonly require regular applications of ground limestone to maintain or raise the pH sufficiently for good crop growth. The supply of available phosphorus and potash is naturally low in most of these soils. On the deep, sandy soils, split applications of fertilizer are needed because of leaching. On all of the soils, additions of lime and fertilizer should be based on the results of soil tests, on the needs of the crops, and on the expected level of yields. The Cooperative Extension Service can help to determine the amounts of fertilizer and lime to apply.

Soil tilth is an important factor in the germination of seeds and the infiltration of water into the soil. The surface layer of most soils in Lee County is sand or loamy sand. Consequently, this layer is granular and porous and has a weak structure. These conditions generally are ideal for good germination of seeds and infiltration of water. The surface layer of these soils, however, generally has a very low content of organic matter and retains only a small amount of moisture.

Fall tillage generally is not recommended because most of the cropland is sloping and subject to water erosion or is subject to soil blowing. For some crops, fall tillage is needed to control insects and disease. In such cases, a winter cover crop should be planted after the soil is tilled.

Yields per Acre

The titles of the tables described in this section are:

- "Irrigated and Nonirrigated Yields of Corn, Cotton Lint, Peanuts, Soybeans, and Wheat by Map Unit Component"
- "Irrigated and Nonirrigated Yields of Bahiagrass and Improved Bermudagrass by Map Unit Component"

The average yields per acre shown in the yields tables in this survey are those that can be expected of the principal crops under a high level of management. In any given year, yields may be higher or lower than those indicated in the tables because of variations in rainfall and other climatic factors. The land capability classification of each map unit also is shown in the tables.

The yields are based mainly on the experience and records of farmers, conservationists, and extension agents. Available yield data from nearby counties and results of field trials and demonstrations also are considered.

The management needed to obtain the indicated yields of the various crops depends on the kind of soil and the crop. Management can include drainage, erosion control, and protection from flooding; the proper planting and seeding rates; suitable high-yielding crop varieties; appropriate and timely tillage; control of weeds, plant diseases, and harmful insects; favorable soil reaction and optimum levels of nitrogen, phosphorus, potassium, and trace elements for each crop; effective use of crop residue, barnyard manure, and green manure crops; and harvesting that ensures the smallest possible loss.

A high level of management includes maintaining proper soil reaction and fertility levels as indicated by standard soil tests. For example, the application rate of nitrogen for corn on soils that have a yield potential of 125 to 150 bushels per acre should be 140 to 160 pounds per acre. If the yield potential for corn is 100 bushels per acre or less, a rate of 100 to 120 pounds of nitrogen per acre should be used. The application of nitrogen in excess of that required for potential yields generally is not

recommended. The excess nitrogen fertilizer that is not utilized by the crop is an unnecessary expense and can cause water pollution. If corn or cotton is grown after the harvest of soybeans or peanuts, nitrogen rates can be reduced by about 20 to 30 pounds per acre. Because nitrogen can be readily leached from sandy soils, more than one application may be needed on these soils during the growing season.

For yields of irrigated crops, it is assumed that the irrigation system is adapted to the soils and to the crops grown, that good-quality irrigation water is uniformly applied as needed, and that tillage is kept to a minimum.

The estimated yields reflect the productive capacity of each soil for each of the principal crops. Yields are likely to increase as new production technology is developed. The productivity of a given soil compared with that of other soils, however, is not likely to change.

Crops other than those shown in the yields tables are grown in the survey area, but estimated yields are not listed because the acreage of such crops is small. The local office of the Natural Resources Conservation Service or of the Cooperative Extension Service can provide information about the management and productivity of the soils for those crops.

Land Capability Classification

Land capability classification shows, in a general way, the suitability of soils for most kinds of field crops. Crops that require special management are excluded. The soils are grouped according to their limitations for field crops, the risk of damage if they are used for crops, and the way they respond to management. The criteria used in grouping the soils do not include major and generally expensive landforming that would change slope, depth, or other characteristics of the soils, nor do they include possible but unlikely major reclamation projects. Capability classification is not a substitute for interpretations designed to show suitability and limitations of groups of soils for rangeland, for forestland, or for engineering purposes.

In the capability system, soils are generally grouped at three levels—capability class, subclass, and unit (USDA, 1961).

Capability classes, the broadest groups, are designated by the numbers 1 through 8. The numbers indicate progressively greater limitations and narrower choices for practical use. The classes are defined as follows:

Class 1 soils have slight limitations that restrict their use.

Class 2 soils have moderate limitations that restrict the choice of plants or that require moderate conservation practices.

Class 3 soils have severe limitations that restrict the choice of plants or that require special conservation practices, or both.

Class 4 soils have very severe limitations that restrict the choice of plants or that require very careful management, or both.

Class 5 soils are subject to little or no erosion but have other limitations, impractical to remove, that restrict their use mainly to pasture, rangeland, forestland, or wildlife habitat.

Class 6 soils have severe limitations that make them generally unsuitable for cultivation and that restrict their use mainly to pasture, rangeland, forestland, or wildlife habitat.

Class 7 soils have very severe limitations that make them unsuitable for cultivation and that restrict their use mainly to grazing, forestland, or wildlife habitat.

Class 8 soils and miscellaneous areas have limitations that preclude commercial plant production and that restrict their use to recreational purposes, wildlife habitat, watershed, or esthetic purposes.

Capability subclasses are soil groups within one class. They are designated by adding a small letter, *e, w, s,* or *c,* to the class numeral, for example, 2e. The letter *e*

shows that the main hazard is the risk of erosion unless close-growing plant cover is maintained; *w* shows that water in or on the soil interferes with plant growth or cultivation (in some soils the wetness can be partly corrected by artificial drainage); *s* shows that the soil is limited mainly because it is shallow, droughty, or stony; and *c,* used in only some parts of the United States, shows that the chief limitation is climate that is very cold or very dry.

In class 1 there are no subclasses because the soils of this class have few limitations. Class 5 contains only the subclasses indicated by *w, s,* or *c* because the soils in class 5 are subject to little or no erosion. They have other limitations that restrict their use to pasture, rangeland, forestland, wildlife habitat, or recreation.

Capability units are soil groups within a subclass. The soils in a capability unit are enough alike to be suited to the same crops and pasture plants, to require similar management, and to have similar productivity. Capability units are generally designated by adding an Arabic numeral to the subclass symbol, for example, 2e-4 and 3e-6. These units are not given in all soil surveys.

The capability classification of the soils in this survey area is given in the section “Detailed Soil Map Units” and in the yields tables.

Prime Farmland and Other Important Farmlands

The table “Prime Farmland and Other Important Farmlands” lists the map units in the survey area that are considered prime farmland and farmland of statewide or local importance. This list does not constitute a recommendation for a particular land use.

In an effort to identify the extent and location of important farmlands, the Natural Resources Conservation Service, in cooperation with other interested Federal, State, and local government organizations, has inventoried land that can be used for the production of the Nation’s food supply.

Prime farmland is of major importance in meeting the Nation’s short- and long-range needs for food and fiber. Because the supply of high-quality farmland is limited, the U.S. Department of Agriculture recognizes that responsible levels of government, as well as individuals, should encourage and facilitate the wise use of our Nation’s prime farmland.

Prime farmland, as defined by the U.S. Department of Agriculture, is land that has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, and oilseed crops and is available for these uses. It could be cultivated land, pastureland, forestland, or other land, but it is not urban or built-up land or water areas. The soil quality, growing season, and moisture supply are those needed for the soil to economically produce sustained high yields of crops when proper management, including water management, and acceptable farming methods are applied. In general, prime farmland has an adequate and dependable supply of moisture from precipitation or irrigation, a favorable temperature and growing season, acceptable acidity or alkalinity, an acceptable salt and sodium content, and few or no rocks. The water supply is dependable and of adequate quality. Prime farmland is permeable to water and air. It is not excessively erodible or saturated with water for long periods, and it either is not frequently flooded during the growing season or is protected from flooding. Slope ranges mainly from 0 to 6 percent. More detailed information about the criteria for prime farmland is available at the local office of the Natural Resources Conservation Service.

About 110,520 acres in the survey area, or 42 percent of the total acreage, meets the soil requirements for prime farmland. Scattered areas of this land are throughout the county, but most are in the central and southern parts. About 100,600 acres of this prime farmland is used for crops. The crops grown on this land, mainly soybeans, cotton, corn, tobacco, and wheat, account for an estimated 48 percent of the total agricultural income of the county each year.

A recent trend in land use in some areas has been the loss of some prime farmland to industrial and urban uses. The loss of prime farmland to other uses puts pressure on marginal lands, which generally are more erodible, droughty, and less productive and cannot be easily cultivated.

For some soils identified in the table as prime farmland, measures that overcome a hazard or limitation, such as flooding, wetness, and droughtiness, are needed. Onsite evaluation is needed to determine whether or not the hazard or limitation has been overcome by corrective measures.

In some areas, land that does not meet the criteria for prime farmland is considered to be *farmland of statewide importance* for the production of food, feed, fiber, forage, and oilseed crops. The criteria for defining and delineating farmland of statewide importance are determined by the appropriate State agencies. Generally, this land includes areas of soils that nearly meet the requirements for prime farmland and that economically produce high yields of crops when treated and managed according to acceptable farming methods. Some areas may produce as high a yield as prime farmland if conditions are favorable. Farmland of statewide importance may include tracts of land that have been designated for agriculture by State law.

In some areas that are not identified as having national or statewide importance, land is considered to be *farmland of local importance* for the production of food, feed, fiber, forage, and oilseed crops. This farmland is identified by the appropriate local agencies. Farmland of local importance may include tracts of land that have been designated for agriculture by local ordinance.

Agricultural Waste Management

The titles of the tables described in this section are:

- "Agricultural Disposal of Manure, Food-Processing Waste, and Sewage Sludge"
- "Agricultural Disposal of Wastewater by Irrigation and Overland Flow"
- "Agricultural Disposal of Wastewater by Rapid Infiltration and Slow Rate Treatment"

Soil properties are important considerations in areas where soils are used as sites for the treatment and disposal of organic waste and wastewater. Selection of soils with properties that favor waste management can help to prevent environmental damage.

The tables described in this section show the degree and kind of soil limitations affecting the treatment of agricultural waste, including municipal and food-processing wastewater and effluent from lagoons or storage ponds. Municipal wastewater is the waste stream from a municipality. It contains domestic waste and may contain industrial waste. It may have received primary or secondary treatment. It is rarely untreated sewage. Food-processing wastewater results from the preparation of fruits, vegetables, milk, cheese, and meats for public consumption. In places it is high in content of sodium and chloride. In the context of these tables, the effluent in lagoons and storage ponds is from facilities used to treat or store food-processing wastewater or domestic or animal waste. Domestic and food-processing wastewater is very dilute, and the effluent from the facilities that treat or store it commonly is very low in content of carbonaceous and nitrogenous material; the content of nitrogen commonly ranges from 10 to 30 milligrams per liter. The wastewater from animal waste treatment lagoons or storage ponds, however, has much higher concentrations of these materials, mainly because the manure has not been diluted as much as the domestic waste. The content of nitrogen in this wastewater generally ranges from 50 to 2,000 milligrams per liter. When wastewater is applied, checks should be made to ensure that nitrogen, heavy metals, and salts are not added in excessive amounts.

The ratings in the tables are for waste management systems that not only dispose of and treat organic waste or wastewater but also are beneficial to crops (application of manure and food-processing waste, application of sewage sludge, and disposal of

wastewater by irrigation) and for waste management systems that are designed only for the purpose of wastewater disposal and treatment (overland flow of wastewater, rapid infiltration of wastewater, and slow rate treatment of wastewater).

The ratings are both verbal and numerical. Rating class terms indicate the extent to which the soils are limited by all of the soil features that affect agricultural waste management. *Not limited* indicates that the soil has features that are very favorable for the specified use. Good performance and very low maintenance can be expected. *Somewhat limited* indicates that the soil has features that are moderately favorable for the specified use. The limitations can be overcome or minimized by special planning, design, or installation. Fair performance and moderate maintenance can be expected. *Very limited* indicates that the soil has one or more features that are unfavorable for the specified use. The limitations generally cannot be overcome without major soil reclamation, special design, or expensive installation procedures. Poor performance and high maintenance can be expected.

Numerical ratings in the tables indicate the severity of individual limitations. The ratings are shown as decimal fractions ranging from 0.01 to 1.00. They indicate gradations between the point at which a soil feature has the greatest negative impact on the use (1.00) and the point at which the soil feature is not a limitation (0.00).

Application of manure and food-processing waste not only disposes of waste material but also can improve crop production by increasing the supply of nutrients in the soils where the material is applied. Manure is the excrement of livestock and poultry, and food-processing waste is damaged fruit and vegetables and the peelings, stems, leaves, pits, and soil particles removed in food preparation. The manure and food-processing waste are either solid, slurry, or liquid. Their nitrogen content varies. A high content of nitrogen limits the application rate. Toxic or otherwise dangerous wastes, such as those mixed with the lye used in food processing, are not considered in the ratings.

The ratings are based on the soil properties that affect absorption, plant growth, microbial activity, erodibility, the rate at which the waste is applied, and the method by which the waste is applied. The properties that affect absorption include permeability, depth to a water table, ponding, the sodium adsorption ratio, depth to bedrock or a cemented pan, and available water capacity. The properties that affect plant growth and microbial activity include reaction, the sodium adsorption ratio, salinity, and bulk density. The wind erodibility group, the soil erodibility factor K, and slope are considered in estimating the likelihood that wind erosion or water erosion will transport the waste material from the application site. Stones, cobbles, a water table, ponding, and flooding can hinder the application of waste. Permanently frozen soils are unsuitable for waste treatment.

Application of sewage sludge not only disposes of waste material but also can improve crop production by increasing the supply of nutrients in the soils where the material is applied. In the context of this table, sewage sludge is the residual product of the treatment of municipal sewage. The solid component consists mainly of cell mass, primarily bacteria cells that developed during secondary treatment and have incorporated soluble organics into their own bodies. The sludge has small amounts of sand, silt, and other solid debris. The content of nitrogen varies. Some sludge has constituents that are toxic to plants or hazardous to the food chain, such as heavy metals and exotic organic compounds, and should be analyzed chemically prior to use.

The content of water in the sludge ranges from about 98 percent to less than 40 percent. The sludge is considered liquid if it is more than about 90 percent water, slurry if it is about 50 to 90 percent water, and solid if it is less than about 50 percent water.

The ratings in the table are based on the soil properties that affect absorption, plant growth, microbial activity, erodibility, the rate at which the sludge is applied, and the

method by which the sludge is applied. The properties that affect absorption, plant growth, and microbial activity include permeability, depth to a water table, ponding, the sodium adsorption ratio, depth to bedrock or a cemented pan, available water capacity, reaction, salinity, and bulk density. The wind erodibility group, the soil erodibility factor K, and slope are considered in estimating the likelihood that wind erosion or water erosion will transport the waste material from the application site. Stones, cobbles, a water table, ponding, and flooding can hinder the application of sludge. Permanently frozen soils are unsuitable for waste treatment.

Disposal of wastewater by irrigation not only disposes of municipal wastewater and wastewater from food-processing plants, lagoons, and storage ponds but also can improve crop production by increasing the amount of water available to crops. The ratings in the table are based on the soil properties that affect the design, construction, management, and performance of the irrigation system. The properties that affect design and management include the sodium adsorption ratio, depth to a water table, ponding, available water capacity, permeability, slope, and flooding. The properties that affect construction include stones, cobbles, depth to bedrock or a cemented pan, depth to a water table, and ponding. The properties that affect performance include depth to bedrock or a cemented pan, bulk density, the sodium adsorption ratio, salinity, reaction, and the cation-exchange capacity, which is used to estimate the capacity of a soil to adsorb heavy metals. Permanently frozen soils are not suitable for disposal of wastewater by irrigation.

Overland flow of wastewater is a process in which wastewater is applied to the upper reaches of sloped land and allowed to flow across vegetated surfaces, sometimes called terraces, to runoff-collection ditches. The length of the run generally is 150 to 300 feet. The application rate ranges from 2.5 to 16.0 inches per week. It commonly exceeds the rate needed for irrigation of cropland. The wastewater leaves solids and nutrients on the vegetated surfaces as it flows downslope in a thin film. Most of the water reaches the collection ditch, some is lost through evapotranspiration, and a small amount may percolate to the ground water.

The ratings in the table are based on the soil properties that affect absorption, plant growth, microbial activity, and the design and construction of the system. Reaction and the cation-exchange capacity affect absorption. Reaction, salinity, and the sodium adsorption ratio affect plant growth and microbial activity. Slope, permeability, depth to a water table, ponding, flooding, depth to bedrock or a cemented pan, stones, and cobbles affect design and construction. Permanently frozen soils are unsuitable for waste treatment.

Rapid infiltration of wastewater is a process in which wastewater applied in a level basin at a rate of 4 to 120 inches per week percolates through the soil. The wastewater may eventually reach the ground water. The application rate commonly exceeds the rate needed for irrigation of cropland. Vegetation is not a necessary part of the treatment; hence, the basins may or may not be vegetated. The thickness of the soil material needed for proper treatment of the wastewater is more than 72 inches. As a result, geologic and hydrologic investigation is needed to ensure proper design and performance and to determine the risk of ground-water pollution.

The ratings in the table are based on the soil properties that affect the risk of pollution and the design, construction, and performance of the system. Depth to a water table, ponding, flooding, and depth to bedrock or a cemented pan affect the risk of pollution and the design and construction of the system. Slope, stones, and cobbles also affect design and construction. Permeability and reaction affect performance. Permanently frozen soils are unsuitable for waste treatment.

Slow rate treatment of wastewater is a process in which wastewater is applied to land at a rate normally between 0.5 inch and 4.0 inches per week. The application rate commonly exceeds the rate needed for irrigation of cropland. The applied wastewater is treated as it moves through the soil. Much of the treated water may percolate to the

ground water, and some enters the atmosphere through evapotranspiration. The applied water generally is not allowed to run off the surface. Waterlogging is prevented either through control of the application rate or through the use of tile drains, or both.

The ratings in the table are based on the soil properties that affect absorption, plant growth, microbial activity, erodibility, and the application of waste. The properties that affect absorption include the sodium adsorption ratio, depth to a water table, ponding, available water capacity, permeability, depth to bedrock or a cemented pan, reaction, the cation-exchange capacity, and slope. Reaction, the sodium adsorption ratio, salinity, and bulk density affect plant growth and microbial activity. The wind erodibility group, the soil erodibility factor K, and slope are considered in estimating the likelihood of wind erosion or water erosion. Stones, cobbles, a water table, ponding, and flooding can hinder the application of waste. Permanently frozen soils are unsuitable for waste treatment.

Forest Productivity and Management

Albert Coffey, forester, Natural Resources Conservation Service, helped prepare this section.

Owners of forestland in Lee County have many objectives. These objectives include producing timber; conserving wildlife, soil, and water (fig. 13); preserving esthetic values; and providing opportunities for recreational activities, such as commercial hunting. Public demand for clean water and recreational areas creates pressures and opportunities for owners of forestland.

The landowner interested in timber production is faced with the challenge of producing greater yields from smaller areas. Meeting this challenge requires intensive management and silvicultural practices. Many modern silvicultural techniques resemble those long practiced in agriculture. They include establishing, weeding, and thinning a desirable young stand; propagating the more productive species and

Figure 13.—Loblolly pine in an area of Dothan loamy sand, 2 to 6 percent slopes. Thinning a stand of loblolly pine encourages tree growth and understory growth and is beneficial for erosion control and wildlife habitat.

genetic varieties; providing short rotations and complete fiber utilization; controlling insects, diseases, and weeds; and improving tree growth by applications of fertilizer and the installation of a drainage system. Even though timber crops require decades to grow, the goal of intensive management is similar to the goal of intensive agriculture. This goal is to produce the greatest yield of the most valuable crop as quickly as possible.

Commercial forests cover about 114,740 acres, or about 44 percent of the land area of Lee County. Commercial forest is land that is producing or is capable of producing crops of industrial wood and that has not been withdrawn from timber production. Loblolly pine is the most important timber species in the county because it grows fast, is adapted to the soil and climate, brings the highest average sale value per acre, and is easy to establish and manage.

For purposes of forest inventory, the predominant forest types identified in Lee County are described in the following paragraphs.

Loblolly-shortleaf—This forest type covers 55,640 acres. It is predominantly loblolly pine, shortleaf pine, or other kinds of southern yellow pine (excluding longleaf pine and slash pine) or a combination of these species. Commonly included trees are oak, hickory, and gum.

Oak-pine—This forest type covers 8,900 acres. It is predominantly hardwoods, usually upland oaks. Pine species make up 25 to 50 percent of the stand. Commonly included trees are gum and hickory.

Oak-hickory—This forest type covers 20,425 acres. It is predominantly upland oaks or hickory, or both. Commonly included trees are gum, elm, and maple.

Oak-gum-cypress—This forest type covers 29,775 acres. It is bottom-land forest consisting predominantly of tupelo, blackgum, sweetgum, oaks, southern cypress, or a combination of these species. Commonly included trees are cottonwood, willow, ash, elm, hackberry, and maple.

One of the first steps in planning intensive forestland management is to determine the potential productivity of the soil for several alternative tree species. The most productive and valued trees are then selected for each soil type. Site and yield information enables a forest manager to estimate future wood supplies. These estimates are the basis of realistic decisions concerning expenses and profits associated with intensive forestland management, land acquisition, or industrial investments.

The potential productivity of forestland in Lee County depends on physiography, soil properties, climate, and the effects of past management. Specific soil properties and site characteristics, including soil depth, texture, structure, and depth to the water table, affect forest productivity primarily by influencing available water capacity, aeration, and root development. The net effects of the interaction of these soil properties and site characteristics determine the potential site productivity.

Forestland Productivity

In the table, "Forestland Productivity," the *potential productivity* of merchantable or *common trees* on a soil is expressed as a site index and as a volume number. The *site index* is the average height, in feet, that dominant and codominant trees of a given species attain in a specified number of years. The site index applies to fully stocked, even-aged, unmanaged stands. Commonly grown trees are those that forest managers generally favor in intermediate or improvement cuttings. They are selected on the basis of growth rate, quality, value, and marketability. More detailed information regarding site index is available in the "National Forestry Manual," which is available in local offices of the Natural Resources Conservation Service or on the Internet.

The *volume of wood fiber*, a number, is the yield likely to be produced by the most important tree species. This number, expressed as cubic feet per acre per year and

calculated at the age of culmination of the mean annual increment (CMAI), indicates the amount of fiber produced in a fully stocked, even-aged, unmanaged stand.

Trees to manage are those that are preferred for planting, seeding, or natural regeneration and those that remain in the stand after thinning or partial harvest.

Forestland Management

The titles of the tables described in this section are:

- “Haul Roads, Log Landings, and Soil Rutting on Forestland”
- “Hazard of Erosion and Suitability for Roads on Forestland”
- “Forestland Planting and Harvesting”
- “Forestland Site Preparation”
- “Damage by Fire and Seedling Mortality on Forestland”

In these tables, interpretive ratings are given for various aspects of forestland management. The ratings are both verbal and numerical.

Some rating class terms indicate the degree to which the soils are suited to a specified aspect of forestland management. *Well suited* indicates that the soil has features that are favorable for the specified management aspect and has no limitations. Good performance can be expected, and little or no maintenance is needed. *Moderately suited* indicates that the soil has features that are moderately favorable for the specified management aspect. One or more soil properties are less than desirable, and fair performance can be expected. Some maintenance is needed. *Poorly suited* indicates that the soil has one or more properties that are unfavorable for the specified management aspect. Overcoming the unfavorable properties requires special design, extra maintenance, and costly alteration. *Unsuited* indicates that the expected performance of the soil is unacceptable for the specified management aspect or that extreme measures are needed to overcome the undesirable soil properties.

Numerical ratings in the tables indicate the severity of individual limitations. The ratings are shown as decimal fractions ranging from 0.01 to 1.00. They indicate gradations between the point at which a soil feature has the greatest negative impact on the specified aspect of forestland management (1.00) and the point at which the soil feature is not a limitation (0.00).

Rating class terms for fire damage and seedling mortality are expressed as *low, moderate,* and *high*. Where these terms are used, the numerical ratings indicate gradations between the point at which the potential for fire damage or seedling mortality is highest (1.00) and the point at which the potential is lowest (0.00).

The paragraphs that follow indicate the soil properties considered in rating the soils. More detailed information about the criteria used in the ratings is available in the “National Forestry Manual,” which is available in local offices of the Natural Resources Conservation Service or on the Internet.

For *limitations affecting construction of haul roads and log landings*, the ratings are based on slope, flooding, permafrost, plasticity index, the hazard of soil slippage, content of sand, the Unified classification, rock fragments on or below the surface, depth to a restrictive layer that is indurated, depth to a water table, and ponding. The limitations are described as slight, moderate, or severe. A rating of *slight* indicates that no significant limitations affect construction activities, *moderate* indicates that one or more limitations can cause some difficulty in construction, and *severe* indicates that one or more limitations can make construction very difficult or very costly.

The ratings of *suitability for log landings* are based on slope, rock fragments on the surface, plasticity index, content of sand, the Unified classification, depth to a water table, ponding, flooding, and the hazard of soil slippage. The soils are described as well suited, moderately suited, or poorly suited to use as log landings.

Ratings in the column *soil rutting hazard* are based on depth to a water table, rock fragments on or below the surface, the Unified classification, depth to a restrictive layer, and slope. Ruts form as a result of the operation of forest equipment. The hazard is described as slight, moderate, or severe. A rating of *slight* indicates that the soil is subject to little or no rutting, *moderate* indicates that rutting is likely, and *severe* indicates that ruts form readily.

Ratings in the column *hazard of off-road or off-trail erosion* are based on slope and on soil erodibility factor K. The soil loss is caused by sheet or rill erosion in off-road or off-trail areas where 50 to 75 percent of the surface has been exposed by logging, grazing, mining, or other kinds of disturbance. The hazard is described as slight, moderate, severe, or very severe. A rating of *slight* indicates that erosion is unlikely under ordinary climatic conditions; *moderate* indicates that some erosion is likely and that erosion-control measures may be needed; *severe* indicates that erosion is very likely and that erosion-control measures, including revegetation of bare areas, are advised; and *very severe* indicates that significant erosion is expected, loss of soil productivity and off-site damage are likely, and erosion-control measures are costly and generally impractical.

Ratings in the column *hazard of erosion on roads and trails* are based on the soil erodibility factor K, slope, and content of rock fragments. The ratings apply to unsurfaced roads and trails. The hazard is described as slight, moderate, or severe. A rating of *slight* indicates that little or no erosion is likely; *moderate* indicates that some erosion is likely, that the roads or trails may require occasional maintenance, and that simple erosion-control measures are needed; and *severe* indicates that significant erosion is expected, that the roads or trails require frequent maintenance, and that costly erosion-control measures are needed.

Ratings in the column *suitability for roads (natural surface)* are based on slope, rock fragments on the surface, plasticity index, content of sand, the Unified classification, depth to a water table, ponding, flooding, and the hazard of soil slippage. The ratings indicate the suitability for using the natural surface of the soil for roads. The soils are described as well suited, moderately suited, or poorly suited to this use.

Ratings in the columns *suitability for hand planting* and *suitability for mechanical planting* are based on slope, depth to a restrictive layer, content of sand, plasticity index, rock fragments on or below the surface, depth to a water table, and ponding. The soils are described as well suited, moderately suited, poorly suited, or unsuited to these methods of planting. It is assumed that necessary site preparation is completed before seedlings are planted.

Ratings in the column *suitability for use of harvesting equipment* are based on slope, rock fragments on the surface, plasticity index, content of sand, the Unified classification, depth to a water table, and ponding. The soils are described as well suited, moderately suited, or poorly suited to this use.

Ratings in the column *suitability for mechanical site preparation (surface)* are based on slope, depth to a restrictive layer, plasticity index, rock fragments on or below the surface, depth to a water table, and ponding. The soils are described as well suited, poorly suited, or unsuited to this management activity. The part of the soil from the surface to a depth of about 1 foot is considered in the ratings.

Ratings in the column *suitability for mechanical site preparation (deep)* are based on slope, depth to a restrictive layer, rock fragments on or below the surface, depth to a water table, and ponding. The soils are described as well suited, poorly suited, or unsuited to this management activity. The part of the soil from the surface to a depth of about 3 feet is considered in the ratings.

Ratings in the column *potential for damage to soil by fire* are based on texture of the surface layer, content of rock fragments and organic matter in the surface layer, thickness of the surface layer, and slope. The soils are described as having a low, moderate, or high potential for this kind of damage. The ratings indicate an evaluation

of the potential impact of prescribed fires or wildfires that are intense enough to remove the duff layer and consume organic matter in the surface layer.

Ratings in the column *potential for seedling mortality* are based on flooding, ponding, depth to a water table, content of lime, reaction, salinity, available water capacity, soil moisture regime, soil temperature regime, aspect, and slope. The soils are described as having a low, moderate, or high potential for seedling mortality.

Windbreaks and Environmental Plantings

Windbreaks protect livestock, buildings, yards, fruit trees, gardens, and cropland from wind and snow; help to keep snow on fields; and provide food and cover for wildlife. Field windbreaks are narrow plantings made at right angles to the prevailing wind and at specific intervals across the field. The interval depends on the erodibility of the soil.

Environmental plantings help to beautify and screen houses and other buildings and to abate noise. The plants, mostly evergreen shrubs and trees, are closely spaced. To ensure plant survival, a healthy planting stock of suitable species should be planted properly on a well prepared site and maintained in good condition.

Additional information on planning windbreaks and screens and planting and caring for trees and shrubs can be obtained from the local office of the Natural Resources Conservation Service or of the Cooperative Extension Service or from a commercial nursery.

Recreational Development

The titles of the tables described in this section are:

- "Camp Areas, Picnic Areas, and Playgrounds"
- "Paths, Trails, and Golf Fairways"

In the tables described in this section, the soils of the survey area are rated according to limitations that affect their suitability for recreational development. The ratings are both verbal and numerical. Rating class terms indicate the extent to which the soils are limited by all of the soil features that affect the recreational uses. *Not limited* indicates that the soil has features that are very favorable for the specified use. Good performance and very low maintenance can be expected. *Somewhat limited* indicates that the soil has features that are moderately favorable for the specified use. The limitations can be overcome or minimized by special planning, design, or installation. Fair performance and moderate maintenance can be expected. *Very limited* indicates that the soil has one or more features that are unfavorable for the specified use. The limitations generally cannot be overcome without major soil reclamation, special design, or expensive installation procedures. Poor performance and high maintenance can be expected.

Numerical ratings in the tables indicate the severity of individual limitations. The ratings are shown as decimal fractions ranging from 0.01 to 1.00. They indicate gradations between the point at which a soil feature has the greatest negative impact on the use (1.00) and the point at which the soil feature is not a limitation (0.00).

The ratings in the tables are based on restrictive soil features, such as wetness, slope, and texture of the surface layer. Susceptibility to flooding is considered. Not considered in the ratings, but important in evaluating a site, are the location and accessibility of the area, the size and shape of the area and its scenic quality, vegetation, access to water, potential water impoundment sites, and access to public sewer lines. The capacity of the soil to absorb septic tank effluent and the ability of the soil to support vegetation also are important. Soils that are subject to flooding are limited for recreational uses by the duration and intensity of flooding and the season

when flooding occurs. In planning recreational facilities, onsite assessment of the height, duration, intensity, and frequency of flooding is essential.

The information in these tables can be supplemented by other information in this survey, for example, interpretations for dwellings without basements, for local roads and streets, and for septic tank absorption fields.

Camp areas require site preparation, such as shaping and leveling the tent and parking areas, stabilizing roads and intensively used areas, and installing sanitary facilities and utility lines. Camp areas are subject to heavy foot traffic and some vehicular traffic. The ratings are based on the soil properties that affect the ease of developing camp areas and the performance of the areas after development. Slope, stoniness, and depth to bedrock or a cemented pan are the main concerns affecting the development of camp areas. The soil properties that affect the performance of the areas after development are those that influence trafficability and promote the growth of vegetation, especially in heavily used areas. For good trafficability, the surface of camp areas should absorb rainfall readily, remain firm under heavy foot traffic, and not be dusty when dry. The soil properties that influence trafficability are texture of the surface layer, depth to a water table, ponding, flooding, permeability, and large stones. The soil properties that affect the growth of plants are depth to bedrock or a cemented pan, permeability, and toxic substances in the soil.

Picnic areas are subject to heavy foot traffic. Most vehicular traffic is confined to access roads and parking areas. The ratings are based on the soil properties that affect the ease of developing picnic areas and that influence trafficability and the growth of vegetation after development. Slope and stoniness are the main concerns affecting the development of picnic areas. For good trafficability, the surface of picnic areas should absorb rainfall readily, remain firm under heavy foot traffic, and not be dusty when dry. The soil properties that influence trafficability are texture of the surface layer, depth to a water table, ponding, flooding, permeability, and large stones. The soil properties that affect the growth of plants are depth to bedrock or a cemented pan, permeability, and toxic substances in the soil.

Playgrounds require soils that are nearly level, are free of stones, and can withstand intensive foot traffic. The ratings are based on the soil properties that affect the ease of developing playgrounds and that influence trafficability and the growth of vegetation after development. Slope and stoniness are the main concerns affecting the development of playgrounds. For good trafficability, the surface of the playgrounds should absorb rainfall readily, remain firm under heavy foot traffic, and not be dusty when dry. The soil properties that influence trafficability are texture of the surface layer, depth to a water table, ponding, flooding, permeability, and large stones. The soil properties that affect the growth of plants are depth to bedrock or a cemented pan, permeability, and toxic substances in the soil.

Paths and trails for hiking and horseback riding should require little or no slope modification through cutting and filling. The ratings are based on the soil properties that affect trafficability and erodibility. These properties are stoniness, depth to a water table, ponding, flooding, slope, and texture of the surface layer.

Off-road motorcycle trails require little or no site preparation. They are not covered with surfacing material or vegetation. Considerable compaction of the soil material is likely. The ratings are based on the soil properties that influence erodibility, trafficability, dustiness, and the ease of revegetation. These properties are stoniness, slope, depth to a water table, ponding, flooding, and texture of the surface layer.

Golf fairways are subject to heavy foot traffic and some light vehicular traffic. Cutting or filling may be required. Irrigation is not considered in the ratings. The ratings are based on the soil properties that affect plant growth and trafficability after vegetation is established. The properties that affect plant growth are reaction; depth to a water table; ponding; depth to bedrock or a cemented pan; the available water capacity in the upper 40 inches; the content of salts, sodium, or calcium carbonate; and sulfidic

materials. The properties that affect trafficability are flooding, depth to a water table, ponding, slope, stoniness, and the amount of sand, clay, or organic matter in the surface layer. The suitability of the soil for traps, tees, roughs, and greens is not considered in the ratings.

Wildlife Habitat

Jim Lewis, wildlife biologist, Natural Resources Conservation Service, helped prepare this section.

Soils affect the kind and amount of vegetation that is available to wildlife as food and cover. They also affect the construction of water impoundments. The kind and abundance of wildlife depend largely on the amount and distribution of food, cover, and water. Wildlife habitat can be created or improved by planting appropriate vegetation, by maintaining the existing plant cover, or by promoting the natural establishment of desirable plants.

Information about soils can be used in planning parks, wildlife refuges, nature study areas, and other developments for wildlife; in selecting soils that are suitable for establishing, improving, or maintaining specific elements of wildlife habitat; and in determining the intensity of management needed for each element of the habitat.

The elements of wildlife habitat are described in the following paragraphs.

Grain and seed crops are domestic grains and seed-producing herbaceous plants. Soil properties and features that affect the growth of grain and seed crops are depth of the root zone, texture of the surface layer, available water capacity, wetness, slope, surface stoniness, and flooding. Soil temperature and soil moisture also are considerations. Examples of grain and seed crops are corn, wheat, oats, and barley.

Grasses and legumes are domestic perennial grasses and herbaceous legumes. Soil properties and features that affect the growth of grasses and legumes are depth of the root zone, texture of the surface layer, available water capacity, wetness, surface stoniness, flooding, and slope. Soil temperature and soil moisture also are considerations. Examples of grasses and legumes are fescue, lovegrass, bromegrass, switchgrass, Indiangrass, little bluestem, clover, and alfalfa.

Wild herbaceous plants are native or naturally established grasses and forbs, including weeds. Soil properties and features that affect the growth of these plants are depth of the root zone, texture of the surface layer, available water capacity, wetness, surface stoniness, and flooding. Soil temperature and soil moisture also are considerations. Examples of wild herbaceous plants are wheatgrass, gamma, bluestem, goldenrod, beggarweed, and partridge pea.

Hardwood trees and woody understory produce nuts or other fruit, buds, catkins, twigs, bark, and foliage. Soil properties and features that affect the growth of hardwood trees and shrubs are depth of the root zone, available water capacity, and wetness. Examples of hardwood trees are oak, hickory, yellow poplar, and sweetgum. Examples of woody understory are black cherry, hawthorn, dogwood, hickory, blackberry, and blueberry. Examples of fruit-producing shrubs that are suitable for planting on soils rated *good* are autumn olive, shrub lespedeza, and crabapple.

Coniferous plants furnish cover, travelways, browse, and seeds. Soil properties and features that affect the growth of coniferous trees, shrubs, and ground cover are depth of the root zone, available water capacity, and wetness. Examples of coniferous plants are pine and eastern red cedar.

Wetland plants are annual and perennial wild herbaceous plants that grow on moist or wet sites. Submerged or floating aquatic plants are excluded. Soil properties and features affecting wetland plants are texture of the surface layer, wetness, reaction, salinity, slope, and surface stoniness. Examples of wetland plants are smartweed, wild millet, cattail, rushes, and sedges.

Shallow water areas have an average depth of less than 5 feet. Some are naturally wet areas. Others are created by dams, levees, or other water-control structures. Soil

Figure 14.—An area of Johnston mucky sandy loam, 0 to 2 percent slopes, frequently flooded. This soil provides excellent habitat for wetland wildlife.

properties and features affecting shallow water areas are depth to bedrock, wetness, surface stoniness, slope, and permeability. Examples of shallow water areas are open wetlands, beaver ponds, waterfowl impoundments, and ponds edges.

The habitat for various kinds of wildlife is described in the following paragraphs.

Habitat for openland wildlife consists of cropland, pasture, and areas that are overgrown with grasses, herbs, shrubs, and vines. These areas produce grain and seed crops, grasses and legumes, and wild herbaceous plants. Wildlife attracted to these areas include many species of migratory birds, cottontail rabbit, and small rodents.

Habitat for woodland wildlife consists of areas of deciduous and/or coniferous plants and associated grasses, legumes, and wild herbaceous plants. Wildlife attracted to these areas include wild turkey, woodcock, thrushes, woodpeckers, squirrels, gray fox, raccoon, and whitetail deer.

Habitat for wetland wildlife (fig. 14) consists of open wetlands or swampy shallow water areas. Some of the wildlife attracted to such areas are ducks, geese, egrets, herons, weasel, mink, and beaver.

Hydric Soils

This section lists the map units that are rated as hydric soils in the survey area. This list can help in planning land uses; however, onsite investigation is recommended to determine the hydric soils on a specific site (National Research Council, 1995; Hurt and others, 2002).

The three essential characteristics of wetlands are hydrophytic vegetation, hydric soils, and wetland hydrology (Cowardin and others, 1979; U.S. Army Corps of Engineers, 1987; National Research Council, 1995; Tiner, 1985). Criteria for all of the

characteristics must be met for areas to be identified as wetlands. Undrained hydric soils that have natural vegetation should support a dominant population of ecological wetland plant species. Hydric soils that have been converted to other uses should be capable of being restored to wetlands.

Hydric soils are defined by the National Technical Committee for Hydric Soils (NTCHS) as soils that formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper part (Federal Register, 1994). These soils, under natural conditions, are either saturated or inundated long enough during the growing season to support the growth and reproduction of hydrophytic vegetation.

The NTCHS definition identifies general soil properties that are associated with wetness. In order to determine whether a specific soil is a hydric soil or nonhydric soil, however, more specific information, such as information about the depth and duration of the water table, is needed. Thus, criteria that identify those estimated soil properties unique to hydric soils have been established (Federal Register, 2002). These criteria are used to identify map unit components that normally are associated with wetlands. The criteria used are selected estimated soil properties that are described in “Soil Taxonomy” (Soil Survey Staff, 1999) and “Keys to Soil Taxonomy” (Soil Survey Staff, 2006) and in the “Soil Survey Manual” (Soil Survey Division Staff, 1993).

If soils are wet enough for a long enough period of time to be considered hydric, they should exhibit certain properties that can be easily observed in the field. These visible properties are indicators of hydric soils. The indicators used to make onsite determinations of hydric soils are specified in “Field Indicators of Hydric Soils in the United States” (Hurt and others, 2002).

Hydric soils are identified by examining and describing the soil to a depth of about 20 inches. This depth may be greater if determination of an appropriate indicator so requires. It is always recommended that soils be excavated and described to the depth necessary for an understanding of the redoximorphic processes. Then, using the completed soil descriptions, soil scientists can compare the soil features required by each indicator and specify which indicators have been matched with the conditions observed in the soil. The soil can be identified as a hydric soil if at least one of the approved indicators is present.

Map units that are dominantly made up of hydric soils may have small areas, or inclusions, of nonhydric soils in the higher positions on the landform, and map units dominantly made up of nonhydric soils may have inclusions of hydric soils in the lower positions on the landform.

The following map units meet the definition of hydric soils and, in addition, have at least one of the hydric soil indicators. This list can help in planning land uses; however, onsite investigation is recommended to determine the hydric soils on a specific site (National Research Council, 1995; Hurt and others, 2002).

CcA Chastain-Chewacla complex, 0 to 2 percent slopes, frequently flooded
CxA Coxville sandy loam, 0 to 2 percent slopes
DaA Dorovan silty clay loam, overwash, 0 to 2 percent slopes, frequently flooded
JoA Johnston muck, 0 to 2 percent slopes, frequently flooded
JzA Johnston-Mouzon complex, 0 to 2 percent slopes, frequently flooded
LuA Lumbee sandy loam, 0 to 2 percent slopes, rarely flooded
MeA Meggett sandy loam, 0 to 2 percent slopes, occasionally flooded
MyA Myatt-Paxville complex, 0 to 2 percent slopes, occasionally flooded
PaA Paxville coarse sandy loam, 0 to 2 percent slopes, occasionally flooded
RaA Rains sandy loam, 0 to 2 percent slopes

The following map units, in general, do not meet the definition of hydric soils because they do not have one of the hydric soil indicators. A portion of these map

units, however, may include hydric soils. Onsite investigation is recommended to determine whether hydric soils occur and the location of the included hydric soils.

AcC Ailey-Troup-Vaucluse complex, 6 to 10 percent slopes
AeD Ailey-Vaucluse-Troup complex, 10 to 15 percent slopes
ChA Chewacla-Chastain complex, 0 to 2 percent slopes, frequently flooded
CwD Cowarts loamy sand, 10 to 15 percent slopes
EuA Eunola sandy loam, 0 to 2 percent slopes, rarely flooded
GoA Goldsboro sandy loam, 0 to 2 percent slopes
JhA Johns loamy sand, 0 to 2 percent slopes, rarely flooded
KaA Kalmia loamy sand, wet substratum, 0 to 2 percent slopes, rarely flooded
LyA Lynchburg sandy loam, 0 to 2 percent slopes
NnA Noboco-Goldsboro complex, 0 to 2 percent slopes
NoA Norfolk loamy sand, 0 to 2 percent slopes
OkA Okeetee fine sandy loam, 0 to 2 percent slopes, rarely flooded
PeA Pelion loamy sand, 0 to 2 percent
SmA Smithboro sandy loam, 0 to 2 percent slopes
StA State-Eunola complex, 0 to 2 percent slopes, rarely flooded
VaC Vaucluse-Cowarts complex, 6 to 10 percent

Engineering

This section provides information for planning land uses related to urban development and to water management. Soils are rated for various uses, and the most limiting features are identified. Ratings are given for building site development, sanitary facilities, construction materials, and water management. The ratings are based on observed performance of the soils and on the data in the tables described under the heading “Soil Properties.”

Information in this section is intended for land use planning, for evaluating land use alternatives, and for planning site investigations prior to design and construction. The information, however, has limitations. For example, estimates and other data generally apply only to that part of the soil between the surface and a depth of 5 to 7 feet. Because of the map scale, small areas of different soils may be included within the mapped areas of a specific soil.

The information is not site specific and does not eliminate the need for onsite investigation of the soils or for testing and analysis by personnel experienced in the design and construction of engineering works.

Government ordinances and regulations that restrict certain land uses or impose specific design criteria were not considered in preparing the information in this section. Local ordinances and regulations should be considered in planning, in site selection, and in design.

Soil properties, site features, and observed performance were considered in determining the ratings in this section. During the fieldwork for this soil survey, determinations were made about particle-size distribution, liquid limit, plasticity index, soil reaction, depth to bedrock, hardness of bedrock within 5 to 7 feet of the surface, soil wetness, depth to a water table, ponding, slope, likelihood of flooding, natural soil structure aggregation, and soil density. Data were collected about kinds of clay minerals, mineralogy of the sand and silt fractions, and the kinds of adsorbed cations. Estimates were made for erodibility, permeability, corrosivity, shrink-swell potential, available water capacity, and other behavioral characteristics affecting engineering uses.

This information can be used to evaluate the potential of areas for residential, commercial, industrial, and recreational uses; make preliminary estimates of construction conditions; evaluate alternative routes for roads, streets, highways,

pipelines, and underground cables; evaluate alternative sites for sanitary landfills, septic tank absorption fields, and sewage lagoons; plan detailed onsite investigations of soils and geology; locate potential sources of gravel, sand, reclamation material, roadfill, and topsoil; plan structures for water management; and predict performance of proposed small structures and pavements by comparing the performance of existing similar structures on the same or similar soils.

The information in the tables, along with the soil maps, the soil descriptions, and other data provided in this survey, can be used to make additional interpretations.

Some of the terms used in this soil survey have a special meaning in soil science and are defined in the Glossary.

Building Site Development

The titles of the tables described in this section are:

- "Dwellings and Small Commercial Buildings"
- "Roads and Streets, Shallow Excavations, and Lawns and Landscaping"

Soil properties influence the development of building sites, including the selection of the site, the design of the structure, construction, performance after construction, and maintenance. The tables described in this section show the degree and kind of soil limitations that affect dwellings with and without basements, small commercial buildings, local roads and streets, shallow excavations, and lawns and landscaping.

The ratings in the tables are both verbal and numerical. Rating class terms indicate the extent to which the soils are limited by all of the soil features that affect building site development. *Not limited* indicates that the soil has features that are very favorable for the specified use. Good performance and very low maintenance can be expected. *Somewhat limited* indicates that the soil has features that are moderately favorable for the specified use. The limitations can be overcome or minimized by special planning, design, or installation. Fair performance and moderate maintenance can be expected. *Very limited* indicates that the soil has one or more features that are unfavorable for the specified use. The limitations generally cannot be overcome without major soil reclamation, special design, or expensive installation procedures. Poor performance and high maintenance can be expected.

Numerical ratings in the tables indicate the severity of individual limitations. The ratings are shown as decimal fractions ranging from 0.01 to 1.00. They indicate gradations between the point at which a soil feature has the greatest negative impact on the use (1.00) and the point at which the soil feature is not a limitation (0.00).

Dwellings are single-family houses of three stories or less. For dwellings without basements, the foundation is assumed to consist of spread footings of reinforced concrete built on undisturbed soil at a depth of 2 feet or at the depth of maximum frost penetration, whichever is deeper. For dwellings with basements, the foundation is assumed to consist of spread footings of reinforced concrete built on undisturbed soil at a depth of about 7 feet. The ratings for dwellings are based on the soil properties that affect the capacity of the soil to support a load without movement and on the properties that affect excavation and construction costs. The properties that affect the load-supporting capacity include depth to a water table, ponding, flooding, subsidence, linear extensibility (shrink-swell potential), and compressibility. Compressibility is inferred from the Unified classification. The properties that affect the ease and amount of excavation include depth to a water table, ponding, flooding, slope, depth to bedrock or a cemented pan, hardness of bedrock or a cemented pan, and the amount and size of rock fragments.

Small commercial buildings are structures that are less than three stories high and do not have basements. The foundation is assumed to consist of spread footings of reinforced concrete built on undisturbed soil at a depth of 2 feet or at the depth of

maximum frost penetration, whichever is deeper. The ratings are based on the soil properties that affect the capacity of the soil to support a load without movement and on the properties that affect excavation and construction costs. The properties that affect the load-supporting capacity include depth to a water table, ponding, flooding, subsidence, linear extensibility (shrink-swell potential), and compressibility (which is inferred from the Unified classification). The properties that affect the ease and amount of excavation include flooding, depth to a water table, ponding, slope, depth to bedrock or a cemented pan, hardness of bedrock or a cemented pan, and the amount and size of rock fragments.

Local roads and streets have an all-weather surface and carry automobile and light truck traffic all year. They have a subgrade of cut or fill soil material; a base of gravel, crushed rock, or soil material stabilized by lime or cement; and a surface of flexible material (asphalt), rigid material (concrete), or gravel with a binder. The ratings are based on the soil properties that affect the ease of excavation and grading and the traffic-supporting capacity. The properties that affect the ease of excavation and grading are depth to bedrock or a cemented pan, hardness of bedrock or a cemented pan, depth to a water table, ponding, flooding, the amount of large stones, and slope. The properties that affect the traffic-supporting capacity are soil strength (as inferred from the AASHTO group index number), subsidence, linear extensibility (shrink-swell potential), the potential for frost action, depth to a water table, and ponding.

Shallow excavations are trenches or holes dug to a maximum depth of 5 or 6 feet for graves, utility lines, open ditches, or other purposes. The ratings are based on the soil properties that influence the ease of digging and the resistance to sloughing. Depth to bedrock or a cemented pan, hardness of bedrock or a cemented pan, the amount of large stones, and dense layers influence the ease of digging, filling, and compacting. Depth to the seasonal high water table, flooding, and ponding may restrict the period when excavations can be made. Slope influences the ease of using machinery. Soil texture, depth to the water table, and linear extensibility (shrink-swell potential) influence the resistance to sloughing.

Lawns and landscaping require soils on which turf and ornamental trees and shrubs can be established and maintained. Irrigation is not considered in the ratings. The ratings are based on the soil properties that affect plant growth and trafficability after vegetation is established. The properties that affect plant growth are reaction; depth to a water table; ponding; depth to bedrock or a cemented pan; the available water capacity in the upper 40 inches; the content of salts, sodium, or calcium carbonate; and sulfidic materials. The properties that affect trafficability are flooding, depth to a water table, ponding, slope, stoniness, and the amount of sand, clay, or organic matter in the surface layer.

Sanitary Facilities

The titles of the tables described in this section are:

- “Sewage Disposal”
- “Landfills”

These tables show the degree and kind of soil limitations that affect septic tank absorption fields, sewage lagoons, sanitary landfills, and daily cover for landfill. The ratings are both verbal and numerical. Rating class terms indicate the extent to which the soils are limited by all of the soil features that affect these uses. *Not limited* indicates that the soil has features that are very favorable for the specified use. Good performance and very low maintenance can be expected. *Somewhat limited* indicates that the soil has features that are moderately favorable for the specified use. The limitations can be overcome or minimized by special planning, design, or installation. Fair performance and moderate maintenance can be expected. *Very limited* indicates

that the soil has one or more features that are unfavorable for the specified use. The limitations generally cannot be overcome without major soil reclamation, special design, or expensive installation procedures. Poor performance and high maintenance can be expected.

Numerical ratings in the tables indicate the severity of individual limitations. The ratings are shown as decimal fractions ranging from 0.01 to 1.00. They indicate gradations between the point at which a soil feature has the greatest negative impact on the use (1.00) and the point at which the soil feature is not a limitation (0.00).

Septic tank absorption fields are areas in which effluent from a septic tank is distributed into the soil through subsurface tiles or perforated pipe. Only that part of the soil between depths of 24 and 60 inches is evaluated. The ratings are based on the soil properties that affect absorption of the effluent, construction and maintenance of the system, and public health. Permeability, depth to a water table, ponding, depth to bedrock or a cemented pan, and flooding affect absorption of the effluent. Stones and boulders, ice, and bedrock or a cemented pan interfere with installation. Subsidence interferes with installation and maintenance. Excessive slope may cause lateral seepage and surfacing of the effluent in downslope areas.

Some soils are underlain by loose sand and gravel or fractured bedrock at a depth of less than 4 feet below the distribution lines. In these soils the absorption field may not adequately filter the effluent, particularly when the system is new. As a result, the ground water may become contaminated.

Sewage lagoons are shallow ponds constructed to hold sewage while aerobic bacteria decompose the solid and liquid wastes. Lagoons should have a nearly level floor surrounded by cut slopes or embankments of compacted soil. Nearly impervious soil material for the lagoon floor and sides is required to minimize seepage and contamination of ground water. Considered in the ratings are slope, permeability, depth to a water table, ponding, depth to bedrock or a cemented pan, flooding, large stones, and content of organic matter.

Soil permeability is a critical property affecting the suitability for sewage lagoons. Most porous soils eventually become sealed when they are used as sites for sewage lagoons. Until sealing occurs, however, the hazard of pollution is severe. Soils that have a permeability rate of more than 2 inches per hour are too porous for the proper functioning of sewage lagoons. In these soils, seepage of the effluent can result in contamination of the ground water. Ground-water contamination is also a hazard if fractured bedrock is within a depth of 40 inches, if the water table is high enough to raise the level of sewage in the lagoon, or if floodwater overtops the lagoon.

A high content of organic matter is detrimental to proper functioning of the lagoon because it inhibits aerobic activity. Slope, bedrock, and cemented pans can cause construction problems, and large stones can hinder compaction of the lagoon floor. If the lagoon is to be uniformly deep throughout, the slope must be gentle enough and the soil material must be thick enough over bedrock or a cemented pan to make land smoothing practical.

A *trench sanitary landfill* is an area where solid waste is placed in successive layers in an excavated trench. The waste is spread, compacted, and covered daily with a thin layer of soil excavated at the site. When the trench is full, a final cover of soil material at least 2 feet thick is placed over the landfill. The ratings in the table are based on the soil properties that affect the risk of pollution, the ease of excavation, trafficability, and revegetation. These properties include permeability, depth to bedrock or a cemented pan, depth to a water table, ponding, slope, flooding, texture, stones and boulders, highly organic layers, soil reaction, and content of salts and sodium. Unless otherwise stated, the ratings apply only to that part of the soil within a depth of about 6 feet. For deeper trenches, onsite investigation may be needed.

Hard, nonrippable bedrock, creviced bedrock, or highly permeable strata in or directly below the proposed trench bottom can affect the ease of excavation and the

hazard of ground-water pollution. Slope affects construction of the trenches and the movement of surface water around the landfill. It also affects the construction and performance of roads in areas of the landfill.

Soil texture and consistence affect the ease with which the trench is dug and the ease with which the soil can be used as daily or final cover. They determine the workability of the soil when dry and when wet. Soils that are plastic and sticky when wet are difficult to excavate, grade, or compact and are difficult to place as a uniformly thick cover over a layer of refuse.

The soil material used as the final cover for a trench landfill should be suitable for plants. It should not have excess sodium or salts and should not be too acid. The surface layer generally has the best workability, the highest content of organic matter, and the best potential for plants. Material from the surface layer should be stockpiled for use as the final cover.

In an *area sanitary landfill*, solid waste is placed in successive layers on the surface of the soil. The waste is spread, compacted, and covered daily with a thin layer of soil from a source away from the site. A final cover of soil material at least 2 feet thick is placed over the completed landfill. The ratings in the table are based on the soil properties that affect trafficability and the risk of pollution. These properties include flooding, permeability, depth to a water table, ponding, slope, and depth to bedrock or a cemented pan.

Flooding is a serious problem because it can result in pollution in areas downstream from the landfill. If permeability is too rapid or if fractured bedrock, a fractured cemented pan, or the water table is close to the surface, the leachate can contaminate the water supply. Slope is a consideration because of the extra grading required to maintain roads in the steeper areas of the landfill. Also, leachate may flow along the surface of the soils in the steeper areas and cause difficult seepage problems.

Daily cover for landfill is the soil material that is used to cover compacted solid waste in an area sanitary landfill. The soil material is obtained offsite, transported to the landfill, and spread over the waste. The ratings in the table also apply to the final cover for a landfill. They are based on the soil properties that affect workability, the ease of digging, and the ease of moving and spreading the material over the refuse daily during wet and dry periods. These properties include soil texture, depth to a water table, ponding, rock fragments, slope, depth to bedrock or a cemented pan, reaction, and content of salts, sodium, or lime.

Loamy or silty soils that are free of large stones and excess gravel are the best cover for a landfill. Clayey soils may be sticky and difficult to spread; sandy soils are subject to wind erosion.

Slope affects the ease of excavation and of moving the cover material. Also, it can influence runoff, erosion, and reclamation of the borrow area.

After soil material has been removed, the soil material remaining in the borrow area must be thick enough over bedrock, a cemented pan, or the water table to permit revegetation. The soil material used as the final cover for a landfill should be suitable for plants. It should not have excess sodium, salts, or lime and should not be too acid.

Construction Materials

The titles of the tables described in this section are:

- “Source of Gravel and Sand”
- “Source of Reclamation Material, Roadfill, and Topsoil”

These tables give information about the soils as potential sources of gravel, sand, reclamation material, roadfill, and topsoil. Normal compaction, minor processing, and other standard construction practices are assumed.

Gravel and *sand* are natural aggregates suitable for commercial use with a minimum of processing. They are used in many kinds of construction. Specifications for each use vary widely. In the table “Source of Gravel and Sand,” only the likelihood of finding material in suitable quantity is evaluated. The suitability of the material for specific purposes is not evaluated, nor are factors that affect excavation of the material. The properties used to evaluate the soil as a source of sand or gravel are gradation of grain sizes (as indicated by the Unified classification of the soil), the thickness of suitable material, and the content of rock fragments. If the bottom layer of the soil contains sand or gravel, the soil is considered a likely source regardless of thickness. The assumption is that the sand or gravel layer below the depth of observation exceeds the minimum thickness.

The soils are rated *good, fair,* or *poor* as potential sources of sand and gravel. A rating of *good* or *fair* means that the source material is likely to be in or below the soil. The bottom layer and the thickest layer of the soils are assigned numerical ratings. These ratings indicate the likelihood that the layer is a source of sand or gravel. The number 0.00 indicates that the layer is a poor source. The number 1.00 indicates that the layer is a good source. A number between 0.00 and 1.00 indicates the degree to which the layer is a likely source.

In the table “Source of Reclamation Material, Roadfill, and Topsoil,” the rating class terms are *good, fair,* and *poor*. The features that limit the soils as sources of these materials are specified in the tables. The numerical ratings given after the specified features indicate the degree to which the features limit the soils as sources of reclamation material, roadfill, and topsoil. The lower the number, the greater the limitation.

Reclamation material is used in areas that have been drastically disturbed by surface mining or similar activities. When these areas are reclaimed, layers of soil material or unconsolidated geological material, or both, are replaced in a vertical sequence. The reconstructed soil favors plant growth. The ratings in the table do not apply to quarries and other mined areas that require an offsite source of reconstruction material. The ratings are based on the soil properties that affect erosion and stability of the surface and the productive potential of the reconstructed soil. These properties include the content of sodium, salts, and calcium carbonate; reaction; available water capacity; erodibility; texture; content of rock fragments; and content of organic matter and other features that affect fertility.

Roadfill is soil material that is excavated in one place and used in road embankments in another place. In this table, the soils are rated as a source of roadfill for low embankments, generally less than 6 feet high and less exacting in design than higher embankments.

The ratings are for the whole soil, from the surface to a depth of about 5 feet. It is assumed that soil layers will be mixed when the soil material is excavated and spread.

The ratings are based on the amount of suitable material and on soil properties that affect the ease of excavation and the performance of the material after it is in place. The thickness of the suitable material is a major consideration. The ease of excavation is affected by large stones, depth to a water table, and slope. How well the soil performs in place after it has been compacted and drained is determined by its strength (as inferred from the AASHTO classification of the soil) and linear extensibility (shrink-swell potential).

Topsoil is used to cover an area so that vegetation can be established and maintained. The upper 40 inches of a soil is evaluated for use as topsoil. Also evaluated is the reclamation potential of the borrow area. The ratings are based on the soil properties that affect plant growth; the ease of excavating, loading, and spreading the material; and reclamation of the borrow area. Toxic substances, soil reaction, and the properties that are inferred from soil texture, such as available water capacity and fertility, affect plant growth. The ease of excavating, loading, and spreading is affected

by rock fragments, slope, depth to a water table, soil texture, and thickness of suitable material. Reclamation of the borrow area is affected by slope, depth to a water table, rock fragments, depth to bedrock or a cemented pan, and toxic material.

The surface layer of most soils is generally preferred for topsoil because of its organic matter content. Organic matter greatly increases the absorption and retention of moisture and nutrients for plant growth.

Water Management

The table “Ponds and Embankments” gives information on the soil properties and site features that affect water management. The degree and kind of soil limitations are given for pond reservoir areas; embankments, dikes, and levees; and aquifer-fed excavated ponds. The ratings are both verbal and numerical. Rating class terms indicate the extent to which the soils are limited by all of the soil features that affect these uses. *Not limited* indicates that the soil has features that are very favorable for the specified use. Good performance and very low maintenance can be expected. *Somewhat limited* indicates that the soil has features that are moderately favorable for the specified use. The limitations can be overcome or minimized by special planning, design, or installation. Fair performance and moderate maintenance can be expected. *Very limited* indicates that the soil has one or more features that are unfavorable for the specified use. The limitations generally cannot be overcome without major soil reclamation, special design, or expensive installation procedures. Poor performance and high maintenance can be expected.

Numerical ratings in the table indicate the severity of individual limitations. The ratings are shown as decimal fractions ranging from 0.01 to 1.00. They indicate gradations between the point at which a soil feature has the greatest negative impact on the use (1.00) and the point at which the soil feature is not a limitation (0.00).

Pond reservoir areas hold water behind a dam or embankment. Soils best suited to this use have low seepage potential in the upper 60 inches. The seepage potential is determined by the permeability of the soil and the depth to fractured bedrock or other permeable material. Excessive slope can affect the storage capacity of the reservoir area.

Embankments, dikes, and levees are raised structures of soil material, generally less than 20 feet high, constructed to impound water or to protect land against overflow. Embankments that have zoned construction (core and shell) are not considered. In this table, the soils are rated as a source of material for embankment fill. The ratings apply to the soil material below the surface layer to a depth of about 5 feet. It is assumed that soil layers will be uniformly mixed and compacted during construction.

The ratings do not indicate the ability of the natural soil to support an embankment. Soil properties to a depth even greater than the height of the embankment can affect performance and safety of the embankment. Generally, deeper onsite investigation is needed to determine these properties.

Soil material in embankments must be resistant to seepage, piping, and erosion and have favorable compaction characteristics. Unfavorable features include less than 5 feet of suitable material and a high content of stones or boulders, organic matter, or salts or sodium. A high water table affects the amount of usable material. It also affects trafficability.

Aquifer-fed excavated ponds are pits or dugouts that extend to a ground-water aquifer or to a depth below a permanent water table. Excluded are ponds that are fed only by surface runoff and embankment ponds that impound water 3 feet or more above the original surface. Excavated ponds are affected by depth to a permanent water table, permeability of the aquifer, and quality of the water as inferred from the

salinity of the soil. Depth to bedrock and the content of large stones affect the ease of excavation.

Soil Properties

Data relating to soil properties are collected during the course of the soil survey.

Soil properties are determined by field examination of the soils and by laboratory index testing of some benchmark soils. Established standard procedures are followed. During the survey, many shallow borings are made and examined to identify and classify the soils and to delineate them on the soil maps. Samples are taken from some typical profiles and tested in the laboratory to determine particle-size distribution, plasticity, and compaction characteristics.

Estimates of soil properties are based on field examinations, on laboratory tests of samples from the survey area, and on laboratory tests of samples of similar soils in nearby areas. Tests verify field observations, verify properties that cannot be estimated accurately by field observation, and help to characterize key soils.

The estimates of soil properties are shown in tables. They include engineering properties, physical and chemical properties, and pertinent soil and water features.

Engineering Properties

The table described in this section gives the engineering classifications and the range of engineering properties for the layers of each soil in the survey area.

Depth to the upper and lower boundaries of each layer is indicated.

Texture is given in the standard terms used by the U.S. Department of Agriculture. These terms are defined according to percentages of sand, silt, and clay in the fraction of the soil that is less than 2 millimeters in diameter. “Loam,” for example, is soil that is 7 to 27 percent clay, 28 to 50 percent silt, and less than 52 percent sand. If the content of particles coarser than sand is 15 percent or more, an appropriate modifier is added, for example, “gravelly.” Textural terms are defined in the Glossary.

Classification of the soils is determined according to the Unified soil classification system (ASTM, 2005) and the system adopted by the American Association of State Highway and Transportation Officials (AASHTO, 2004).

The Unified system classifies soils according to properties that affect their use as construction material. Soils are classified according to particle-size distribution of the fraction less than 3 inches in diameter and according to plasticity index, liquid limit, and organic matter content. Sandy and gravelly soils are identified as GW, GP, GM, GC, SW, SP, SM, and SC; silty and clayey soils as ML, CL, OL, MH, CH, and OH; and highly organic soils as PT. Soils exhibiting engineering properties of two groups can have a dual classification, for example, CL-ML.

The AASHTO system classifies soils according to those properties that affect roadway construction and maintenance. In this system, the fraction of a mineral soil that is less than 3 inches in diameter is classified in one of seven groups from A-1 through A-7 on the basis of particle-size distribution, liquid limit, and plasticity index. Soils in group A-1 are coarse grained and low in content of fines (silt and clay). At the other extreme, soils in group A-7 are fine grained. Highly organic soils are classified in group A-8 on the basis of visual inspection.

If laboratory data are available, the A-1, A-2, and A-7 groups are further classified as A-1-a, A-1-b, A-2-4, A-2-5, A-2-6, A-2-7, A-7-5, or A-7-6. As an additional refinement, the suitability of a soil as subgrade material can be indicated by a group

index number. Group index numbers range from 0 for the best subgrade material to 20 or higher for the poorest. The AASHTO classification for soils tested, with group index numbers in parentheses, is given in the table “Engineering Index Test Data.”

Rock fragments larger than 10 inches in diameter and 3 to 10 inches in diameter are indicated as a percentage of the total soil on a dry-weight basis. The percentages are estimates determined mainly by converting volume percentage in the field to weight percentage.

Percentage (of soil particles) passing designated sieves is the percentage of the soil fraction less than 3 inches in diameter based on an ovendry weight. The sieves, numbers 4, 10, 40, and 200 (USA Standard Series), have openings of 4.76, 2.00, 0.420, and 0.074 millimeters, respectively. Estimates are based on laboratory tests of soils sampled in the survey area and in nearby areas and on estimates made in the field.

Liquid limit and *plasticity index* (Atterberg limits) indicate the plasticity characteristics of a soil. The estimates are based on test data from the survey area or from nearby areas and on field examination.

Physical Soil Properties

The table described in this section shows estimates of some physical characteristics and features that affect soil behavior. These estimates are given for the layers of each soil in the survey area. The estimates are based on field observations and on test data for these and similar soils.

Depth to the upper and lower boundaries of each layer is indicated.

Particle size is the effective diameter of a soil particle as measured by sedimentation, sieving, or micrometric methods. Particle sizes are expressed as classes with specific effective diameter class limits. The broad classes are sand, silt, and clay, ranging from the larger to the smaller.

Sand as a soil separate consists of mineral soil particles that are 0.05 millimeter to 2 millimeters in diameter. In the table, the estimated sand content of each soil layer is given as a percentage, by weight, of the soil material that is less than 2 millimeters in diameter.

Silt as a soil separate consists of mineral soil particles that are 0.002 to 0.05 millimeter in diameter. In the table, the estimated silt content of each soil layer is given as a percentage, by weight, of the soil material that is less than 2 millimeters in diameter.

Clay as a soil separate consists of mineral soil particles that are less than 0.002 millimeter in diameter. In the table, the estimated clay content of each soil layer is given as a percentage, by weight, of the soil material that is less than 2 millimeters in diameter.

The content of sand, silt, and clay affects the physical behavior of a soil. Particle size is important for engineering and agronomic interpretations, for determination of soil hydrologic qualities, and for soil classification.

The amount and kind of clay affect the fertility and physical condition of the soil and the ability of the soil to adsorb cations and to retain moisture. They influence shrink-swell potential, permeability, plasticity, the ease of soil dispersion, and other soil properties. The amount and kind of clay in a soil also affect tillage and earthmoving operations.

Moist bulk density is the weight of soil (ovendry) per unit volume. Volume is measured when the soil is at field moisture capacity, that is, the moisture content at $^{1}/_{3}$- or $^{1}/_{10}$-bar (33kPa or 10kPa) moisture tension. Weight is determined after the soil is dried at 105 degrees C. In the table, the estimated moist bulk density of each soil horizon is expressed in grams per cubic centimeter of soil material that is less than 2 millimeters in diameter. Bulk density data are used to compute linear extensibility,

shrink-swell potential, available water capacity, total pore space, and other soil properties. The moist bulk density of a soil indicates the pore space available for water and roots. Depending on soil texture, a bulk density of more than 1.4 can restrict water storage and root penetration. Moist bulk density is influenced by texture, kind of clay, content of organic matter, and soil structure.

Saturated hydraulic conductivity refers to the ability of a soil to transmit water or air. The term “permeability,” as used in soil surveys, indicates saturated hydraulic conductivity (K_{sat}). The estimates in the table indicate the rate of water movement, in micrometers per second, when the soil is saturated. They are based on soil characteristics observed in the field, particularly structure, porosity, and texture. Permeability is considered in the design of soil drainage systems and septic tank absorption fields.

Available water capacity refers to the quantity of water that the soil is capable of storing for use by plants. The capacity for water storage is given in inches of water per inch of soil for each soil layer. The capacity varies, depending on soil properties that affect retention of water. The most important properties are the content of organic matter, soil texture, bulk density, and soil structure. Available water capacity is an important factor in the choice of plants or crops to be grown and in the design and management of irrigation systems. Available water capacity is not an estimate of the quantity of water actually available to plants at any given time.

Linear extensibility refers to the change in length of an unconfined clod as moisture content is decreased from a moist to a dry state. It is an expression of the volume change between the water content of the clod at $^1/_3$- or $^1/_{10}$-bar tension (33kPa or 10kPa tension) and oven dryness. The volume change is reported in the table as percent change for the whole soil. Volume change is influenced by the amount and type of clay minerals in the soil.

Linear extensibility is used to determine the shrink-swell potential of soils. The shrink-swell potential is low if the soil has a linear extensibility of less than 3 percent; moderate if 3 to 6 percent; high if 6 to 9 percent; and very high if more than 9 percent. If the linear extensibility is more than 3, shrinking and swelling can cause damage to buildings, roads, and other structures and to plant roots. Special design commonly is needed.

Organic matter is the plant and animal residue in the soil at various stages of decomposition. In the table, the estimated content of organic matter is expressed as a percentage, by weight, of the soil material that is less than 2 millimeters in diameter.

The content of organic matter in a soil can be maintained by returning crop residue to the soil. Organic matter has a positive effect on available water capacity, water infiltration, soil organism activity, and tilth. It is a source of nitrogen and other nutrients for crops and soil organisms.

Erosion factors are shown in the table as the K factor (Kw and Kf) and the T factor. Erosion factor K indicates the susceptibility of a soil to sheet and rill erosion by water. Factor K is one of six factors used in the Universal Soil Loss Equation (USLE) and the Revised Universal Soil Loss Equation (RUSLE) to predict the average annual rate of soil loss by sheet and rill erosion in tons per acre per year. The estimates are based primarily on percentage of silt, sand, and organic matter and on soil structure and permeability. Values of K range from 0.02 to 0.69. Other factors being equal, the higher the value, the more susceptible the soil is to sheet and rill erosion by water.

Erosion factor Kw indicates the erodibility of the whole soil. The estimates are modified by the presence of rock fragments.

Erosion factor Kf indicates the erodibility of the fine-earth fraction, or the material less than 2 millimeters in size.

Erosion factor T is an estimate of the maximum average annual rate of soil erosion by wind or water that can occur without affecting crop productivity over a sustained period. The rate is in tons per acre per year.

Wind erodibility groups are made up of soils that have similar properties affecting their susceptibility to wind erosion in cultivated areas. The soils assigned to group 1 are the most susceptible to wind erosion, and those assigned to group 8 are the least susceptible. The groups are as follows:

1. Coarse sands, sands, fine sands, and very fine sands.
2. Loamy coarse sands, loamy sands, loamy fine sands, loamy very fine sands, ash material, and sapric soil material.
3. Coarse sandy loams, sandy loams, fine sandy loams, and very fine sandy loams.

4L. Calcareous loams, silt loams, clay loams, and silty clay loams.

4. Clays, silty clays, noncalcareous clay loams, and silty clay loams that are more than 35 percent clay.
5. Noncalcareous loams and silt loams that are less than 20 percent clay and sandy clay loams, sandy clays, and hemic soil material.
6. Noncalcareous loams and silt loams that are more than 20 percent clay and noncalcareous clay loams that are less than 35 percent clay.
7. Silts, noncalcareous silty clay loams that are less than 35 percent clay, and fibric soil material.
8. Soils that are not subject to wind erosion because of rock fragments on the surface or because of surface wetness.

Wind erodibility index is a numerical value indicating the susceptibility of soil to wind erosion, or the tons per acre per year that can be expected to be lost to wind erosion. There is a close correlation between wind erosion and the texture of the surface layer, the size and durability of surface clods, rock fragments, organic matter, and a calcareous reaction. Soil moisture and frozen soil layers also influence wind erosion.

Chemical Soil Properties

The table described in this section shows estimates of some chemical characteristics and features that affect soil behavior. These estimates are given for the layers of each soil in the survey area. The estimates are based on field observations and on test data for these and similar soils.

Depth to the upper and lower boundaries of each layer is indicated.

Cation-exchange capacity is the total amount of extractable bases that can be held by the soil, expressed in terms of milliequivalents per 100 grams of soil at neutrality (pH 7.0) or at some other stated pH value. Soils having a low cation-exchange capacity hold fewer cations and may require more frequent applications of fertilizer than soils having a high cation-exchange capacity. The ability to retain cations reduces the hazard of ground-water pollution.

Effective cation-exchange capacity refers to the sum of extractable bases plus aluminum expressed in terms of milliequivalents per 100 grams of soil. It is determined for soils that have pH of less than 5.5.

Soil reaction is a measure of acidity or alkalinity. The pH of each soil horizon is based on many field tests. For many soils, values have been verified by laboratory analyses. Soil reaction is important in selecting crops and other plants, in evaluating soil amendments for fertility and stabilization, and in determining the risk of corrosion.

Water Features

The table described in this section gives estimates of various water features. The estimates are used in land use planning that involves engineering considerations.

Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils

are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

The four hydrologic soil groups are:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas.

Surface runoff refers to the loss of water from an area by flow over the land surface. Surface runoff classes are based on slope, climate, and vegetative cover. It is assumed that the surface of the soil is bare and that the retention of surface water resulting from irregularities in the ground surface is minimal. The classes are negligible, very low, low, medium, high, and very high.

The *months* in the table indicate the portion of the year in which the feature is most likely to be a concern.

Water table refers to a saturated zone in the soil. The table indicates, by month, depth to the top (*upper limit*) and base (*lower limit*) of the saturated zone in most years. Estimates of the upper and lower limits are based mainly on observations of the water table at selected sites and on evidence of a saturated zone, namely grayish colors or mottles (redoximorphic features) in the soil. A saturated zone that lasts for less than a month is not considered a water table.

Ponding is standing water in a closed depression. Unless a drainage system is installed, the water is removed only by percolation, transpiration, or evaporation. The table indicates *surface water depth* and the *duration* and *frequency* of ponding. Duration is expressed as *very brief* if less than 2 days, *brief* if 2 to 7 days, *long* if 7 to 30 days, and *very long* if more than 30 days. Frequency is expressed as none, rare, occasional, and frequent. *None* means that ponding is not probable; *rare* that it is unlikely but possible under unusual weather conditions (the chance of ponding is nearly 0 percent to 5 percent in any year); *occasional* that it occurs, on the average, once or less in 2 years (the chance of ponding is 5 to 50 percent in any year); and *frequent* that it occurs, on the average, more than once in 2 years (the chance of ponding is more than 50 percent in any year).

Flooding is the temporary inundation of an area caused by overflowing streams, by runoff from adjacent slopes, or by tides. Water standing for short periods after rainfall or snowmelt is not considered flooding, and water standing in swamps and marshes is considered ponding rather than flooding.

Duration and *frequency* are estimated. Duration is expressed as *extremely brief* if 0.1 hour to 4 hours, *very brief* if 4 hours to 2 days, *brief* if 2 to 7 days, *long* if 7 to 30 days, and *very long* if more than 30 days. Frequency is expressed as none, very rare, rare, occasional, frequent, and very frequent. *None* means that flooding is not probable; *very rare* that it is very unlikely but possible under extremely unusual

weather conditions (the chance of flooding is less than 1 percent in any year); *rare* that it is unlikely but possible under unusual weather conditions (the chance of flooding is 1 to 5 percent in any year); *occasional* that it occurs infrequently under normal weather conditions (the chance of flooding is 5 to 50 percent in any year); *frequent* that it is likely to occur often under normal weather conditions (the chance of flooding is more than 50 percent in any year but is less than 50 percent in all months in any year); and *very frequent* that it is likely to occur very often under normal weather conditions (the chance of flooding is more than 50 percent in all months of any year).

The information is based on evidence in the soil profile, namely thin strata of gravel, sand, silt, or clay deposited by floodwater; irregular decrease in organic matter content with increasing depth; and little or no horizon development.

Also considered are local information about the extent and levels of flooding and the relation of each soil on the landscape to historic floods. Information on the extent of flooding based on soil data is less specific than that provided by detailed engineering surveys that delineate flood-prone areas at specific flood frequency levels.

Soil Features

The table described in this section gives estimates of various soil features. The estimates are used in land use planning that involves engineering considerations.

A *restrictive layer* is a nearly continuous layer that has one or more physical, chemical, or thermal properties that significantly impede the movement of water and air through the soil or that restrict roots or otherwise provide an unfavorable root environment. Examples are bedrock, cemented layers, dense layers, and frozen layers. The table indicates the hardness and thickness of the restrictive layer, both of which significantly affect the ease of excavation. *Depth to top* is the vertical distance from the soil surface to the upper boundary of the restrictive layer.

Subsidence is the settlement of organic soils or of saturated mineral soils of very low density. Subsidence generally results from either desiccation and shrinkage or oxidation of organic material, or both, following drainage. Subsidence takes place gradually, usually over a period of several years. The table shows the expected initial subsidence, which usually is a result of drainage, and total subsidence, which results from a combination of factors.

Potential for frost action is the likelihood of upward or lateral expansion of the soil caused by the formation of segregated ice lenses (frost heave) and the subsequent collapse of the soil and loss of strength on thawing. Frost action occurs when moisture moves into the freezing zone of the soil. Temperature, texture, density, permeability, content of organic matter, and depth to the water table are the most important factors considered in evaluating the potential for frost action. It is assumed that the soil is not insulated by vegetation or snow and is not artificially drained. Silty and highly structured, clayey soils that have a high water table in winter are the most susceptible to frost action. Well drained, very gravelly, or very sandy soils are the least susceptible. Frost heave and low soil strength during thawing cause damage to pavements and other rigid structures.

Risk of corrosion pertains to potential soil-induced electrochemical or chemical action that corrodes or weakens uncoated steel or concrete. The rate of corrosion of uncoated steel is related to such factors as soil moisture, particle-size distribution, acidity, and electrical conductivity of the soil. The rate of corrosion of concrete is based mainly on the sulfate and sodium content, texture, moisture content, and acidity of the soil. Special site examination and design may be needed if the combination of factors results in a severe hazard of corrosion. The steel or concrete in installations that intersect soil boundaries or soil layers is more susceptible to corrosion than the steel or concrete in installations that are entirely within one kind of soil or within one soil layer.

For uncoated steel, the risk of corrosion, expressed as *low, moderate,* or *high,* is based on soil drainage class, total acidity, electrical resistivity near field capacity, and electrical conductivity of the saturation extract.

For concrete, the risk of corrosion also is expressed as *low, moderate,* or *high*. It is based on soil texture, acidity, and amount of sulfates in the saturation extract.

Classification of the Soils

The system of soil classification used by the National Cooperative Soil Survey has six categories (Soil Survey Staff, 1999 and 2006). Beginning with the broadest, these categories are the order, suborder, great group, subgroup, family, and series. Classification is based on soil properties observed in the field or inferred from those observations or from laboratory measurements. The categories are defined in the following paragraphs.

ORDER. Twelve soil orders are recognized. The differences among orders reflect the dominant soil-forming processes and the degree of soil formation. Each order is identified by a word ending in *sol*. An example is Ultisol.

SUBORDER. Each order is divided into suborders primarily on the basis of properties that influence soil genesis and are important to plant growth or properties that reflect the most important variables within the orders. The last syllable in the name of a suborder indicates the order. An example is Udult (*Ud*, meaning humid, plus *ult*, from Ultisol).

GREAT GROUP. Each suborder is divided into great groups on the basis of close similarities in kind, arrangement, and degree of development of pedogenic horizons; soil moisture and temperature regimes; type of saturation; and base status. Each great group is identified by the name of a suborder and by a prefix that indicates a property of the soil. An example is Hapludults (*Hapl*, meaning minimal horizonation, plus *udult*, the suborder of the Ultisols that has a udic moisture regime).

SUBGROUP. Each great group has a typic subgroup. Other subgroups are intergrades or extragrades. The typic subgroup is the central concept of the great group; it is not necessarily the most extensive. Intergrades are transitions to other orders, suborders, or great groups. Extragrades have some properties that are not representative of the great group but do not indicate transitions to any other taxonomic class. Each subgroup is identified by one or more adjectives preceding the name of the great group. The adjective *Typic* identifies the subgroup that typifies the great group. An example is Typic Hapludults.

FAMILY. Families are established within a subgroup on the basis of physical and chemical properties and other characteristics that affect management. Generally, the properties are those of horizons below plow depth where there is much biological activity. Among the properties and characteristics considered are particle-size class, mineralogy class, cation-exchange activity class, soil temperature regime, soil depth, and reaction class. A family name consists of the name of a subgroup preceded by terms that indicate soil properties. An example is fine-loamy, siliceous, active, thermic Typic Hapludults.

SERIES. The series consists of soils within a family that have horizons similar in color, texture, structure, reaction, consistence, mineral and chemical composition, and arrangement in the profile.

The table “Taxonomic Classification of the Soils” indicates the order, suborder, great group, subgroup, and family of the soil series in the survey area.

Soil Series and Their Morphology

In this section, each soil series recognized in the survey area is described. Characteristics of the soil and the material in which it formed are identified for each

series. A pedon, a small three-dimensional area of soil, that is typical of the series in the survey area is described. The detailed description of each soil horizon follows standards in the “Soil Survey Manual” (Soil Survey Division Staff, 1993) and in the “Field Book for Describing and Sampling Soils” (Schoeneberger and others, 2002). Many of the technical terms used in the descriptions are defined in “Soil Taxonomy” (Soil Survey Staff, 1999) and in “Keys to Soil Taxonomy” (Soil Survey Staff, 2006). Unless otherwise indicated, colors in the descriptions are for moist soil. Following the pedon description is the range of important characteristics of the soils in the series.

Ailey Series

Major land resource area: Southern Coastal Plain and Carolina and Georgia Sand Hills
Geomorphic setting: Marine terraces on upper coastal plains
Parent material: Loamy fluviomarine deposits
Drainage class: Well drained
Slowest saturated hydraulic conductivity: Moderately low
Depth class: Very deep
Slope: 0 to 15 percent
Commonly associated soils: Alpin, Candor, Troup, and Cowarts

Taxonomic Classification

Loamy, kaolinitic, thermic Arenic Kanhapludults (fig. 15)

Typical Pedon

Ailey sand in an area of Ailey-Troup-Vaucluse complex, 6 to 10 percent slopes; in Lee County, S.C., about 1.2 miles northwest on W. Church Street from the intersection of Main Street and W. Church Street in Bishopville, 9.3 miles west on Camden Highway, 0.4 mile south across I-20 overpass, 2.1 miles southwest on Jamestown Road, 0.1 mile west on Red Hill Road, 500 feet south of Red Hill Road; elevation 290 feet; Spring Hill, S.C., 7.5-minute topographic quadrangle; lat. 34 degrees 11 minutes 27 seconds N. and long. 80 degrees 26 minutes 52 seconds W.

Ap—0 to 8 inches; brown (10YR 4/3) sand; weak medium granular structure; very friable; nonsticky, nonplastic; few very fine and fine roots; few very fine pores; strongly acid; abrupt smooth boundary.

E—8 to 22 inches; very pale brown (10YR 4/4) sand; single grain; loose; nonsticky, nonplastic; few fine roots; few very fine pores; strongly acid; clear wavy boundary.

Bt—22 to 31 inches; reddish yellow (7.5YR 6/6) sandy clay loam; moderate medium subangular blocky structure; friable; slightly sticky, slightly plastic; few fine roots; few very fine pores; common distinct clay films on faces of peds; very strongly acid; clear wavy boundary.

Btx—31 to 42 inches; reddish yellowish (7.5YR 7/6) sandy clay loam; moderate medium subangular blocky structure; 70 percent friable; 30 percent firm and brittle; slightly sticky, slightly plastic; few fine roots; few very fine pores; common distinct clay films on faces of peds; common medium prominent yellowish red (5YR 5/8) masses of oxidized iron; strongly acid; clear wavy boundary.

BCt—42 to 65 inches; yellow (10YR 7/8) sandy loam; weak coarse subangular blocky structure; friable; few, 2 to 5 mm, white (10YR 8/1) kaolin masses; few fine roots; few very fine pores; few distinct clay bridges between sand grains; common fine flakes of mica; strongly acid; clear wavy boundary.

C—65 to 80 inches; very pale brown (10YR 8/4) coarse sandy loam; massive; friable; few, 2 to 5 mm, white (10YR 8/1) kaolin masses; very strongly acid.

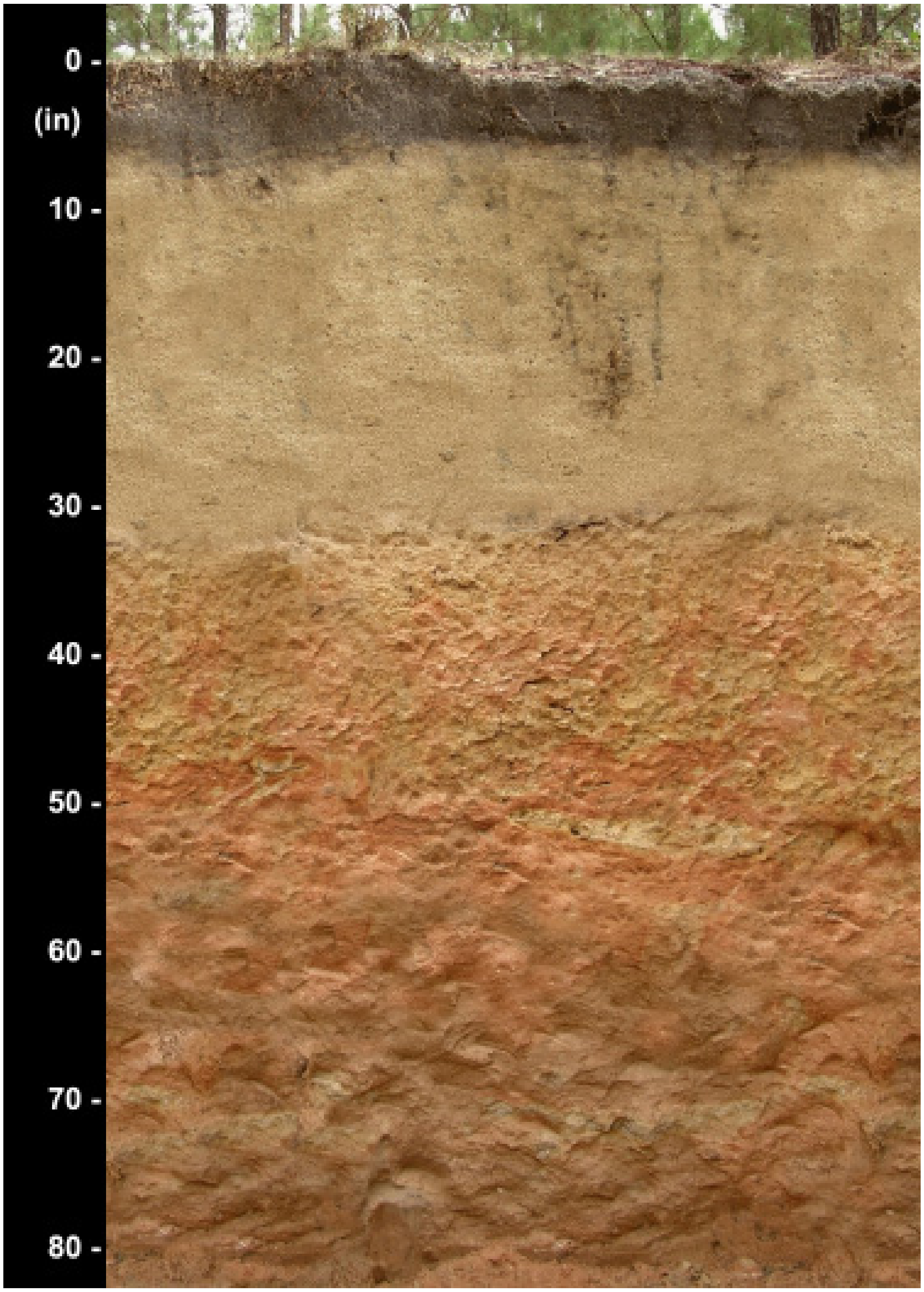

Figure 15.—Profile of a soil in the Ailey series.

Range in Characteristics

Thickness of sandy surface and subsurface layers: 20 to 40 inches
Depth to top of argillic horizon: 20 to 40 inches
Depth to base of argillic horizon: 32 to 80 inches
Depth to top of kandic horizon: 20 to 40 inches
Depth to contrasting soil material (lithologic discontinuity): 40 to more than 80 inches
Depth to densic materials: 40 to more than 80 inches
Depth to fragic soil properties: 26 to 60 inches

Soil reaction: Very strongly acid or strongly acid throughout, except where lime has been applied
Mica content: 0 to 20 percent
Depth to bedrock: More than 80 inches
Depth to seasonal high water table: More than 6.0 feet

A or Ap horizon:
Color—hue of 10YR, value of 3 to 5, and chroma of 1 to 3
Texture—sand
Content and size of rock fragments—0 to 14 percent; mostly quartz pebbles and ironstone nodules

E horizon:
Color—hue of 10YR, value of 5 to 7, and chroma of 3 to 8
Texture—sand
Content and size of rock fragments—0 to 14 percent; mostly quartz pebbles and ironstone nodules

Bt horizon:
Color—hue of 5YR to 10YR, value of 4 to 6, and chroma of 4 to 8
Texture—sandy loam or sandy clay loam
Content and size of rock fragments—0 to 6 percent; mostly ironstone nodules

Btx horizon:
Color—hue of 5YR to 10YR, value of 4 to 6, and chroma of 4 to 8
Texture—sandy clay loam
Content and size of rock fragments—0 to 6 percent; mostly ironstone nodules
Redoximorphic features (where present)—iron depletions in shades of gray and masses of oxidized iron in shades of red, yellow, and brown

BC horizon (where present):
Color—hue of 2.5YR to 10YR, value of 4 to 7, and chroma of 4 to 8
Texture—coarse sandy loam, sandy loam, or sandy clay loam
Content and size of rock fragments—0 to 6 percent; mostly ironstone nodules
Redoximorphic features (where present)—iron depletions in shades of gray and masses of oxidized iron in shades of red, yellow, and brown

C, 2C, Cd, or 2Cd horizon (where present):
Color—hue of 2.5YR to 10YR, value of 4 to 7, and chroma of 1 to 8
Texture—coarse sandy loam, sandy loam, sandy clay loam, or silty clay loam
Content and size of rock fragments—0 to 6 percent; mostly ironstone nodules
Redoximorphic features (where present)—iron depletions in shades of gray and masses of oxidized iron in shades of red, yellow, and brown

Alaga Series

Major land resource area: Southern Coastal Plain
Geomorphic setting: Sand sheets on middle coastal plains and stream terraces in river valleys
Parent material: Eolian sands and sandy alluvium
Drainage class: Somewhat excessively drained
Slowest saturated hydraulic conductivity: High
Depth class: Very deep
Slope: 0 to 4 percent
Commonly associated soils: Candor and Troup on sand sheets and Lucknow, Eunola, Johns, Kalmia, and State on stream terraces

Taxonomic Classification

Thermic, coated Typic Quartzipsamments

Typical Pedon

Alaga sand in an area of Alaga sand, 0 to 4 percent slopes; in Lee County, S.C., 2.9 miles southeast on Manville-St. Charles Road from its intersection with Sumter Highway at Manville, 0.35 mile south on Raccoon Road, 200 feet northwest of Raccoon Road; elevation 200 feet; Oswego, S.C., 7.5-minute topographic quadrangle; lat. 34 degrees 07 minutes 02 seconds N. and long. 80 degrees 16 minutes 36 seconds W.

Ap—0 to 7 inches; brown (10YR 4/3) sand; weak medium granular structure; very friable; nonsticky, nonplastic; few very fine and fine roots throughout; few very fine pores; strongly acid; abrupt smooth boundary.

C1—7 to 16 inches; yellowish brown (10YR 5/6) sand; single grain; loose; nonsticky, nonplastic; few fine and medium roots throughout; few very fine pores; strongly acid; gradual wavy boundary.

C2—16 to 36 inches; strong brown (7.5YR 5/8) loamy sand; single grain; loose; nonsticky, nonplastic; few fine and medium roots throughout; few very fine pores; strongly acid; gradual wavy boundary.

C3—36 to 51 inches; brownish yellow (10YR 6/6) sand; single grain; loose; nonsticky, nonplastic; strongly acid; gradual wavy boundary.

C4—51 to 61 inches; very pale brown (10YR 8/4) sand; single grain; loose; nonsticky, nonplastic; strongly acid; gradual wavy boundary.

C5—61 to 80 inches; yellow (10YR 7/6) sand; single grain; loose; nonsticky, nonplastic; common coarse prominent very pale brown (10YR 8/2) iron depletions; strongly acid.

Range in Characteristics

Thickness of sandy surface and underlying materials: More than 80 inches
Soil reaction: Extremely acid to moderately acid throughout, except where lime has been applied
Depth to bedrock: More than 80 inches
Depth to seasonal high water table: 4.0 to 6.0 feet
Other distinctive properties: 10 to 25 percent silt plus clay content in the 10- to 40-inch control section with clay content of 2 to 12 percent

A or Ap horizon:
Color—hue of 10YR, value of 3 or 4, and chroma of 2 to 4
Texture—sand or loamy sand
Content and size of rock fragments—0 to 12 percent; mostly quartz pebbles

C horizon:
Color—hue of 7.5YR or 10YR, value of 4 to 8, and chroma of 4 to 8
Texture—coarse sand, sand, fine sand, loamy sand, or loamy fine sand
Content and size of rock fragments—0 to 12 percent; mostly quartz pebbles
Redoximorphic features (where present)—iron or clay depletions in shades of gray and masses of oxidized iron in shades of red, yellow, and brown

Alpin Series

Major land resource area: Carolina and Georgia Sand Hills
Geomorphic setting: Dunes on sandhills
Parent material: Eolian sands
Drainage class: Excessively drained

Slowest saturated hydraulic conductivity: High
Depth class: Very deep
Slope: 0 to 15 percent
Commonly associated soils: Ailey, Lucknow, Candor, Cowarts, Troup, Lakeland, and Johnston

Taxonomic Classification

Thermic, coated Lamellic Quartzipsamments

Typical Pedon

Alpin sand in an area of Alpin sand, 0 to 6 percent slopes; in Lee County, S.C., 6.15 miles north on Bethune Highway from its intersection with North Main Street in Bishopville, 0.65 mile west on Eddie Watkins Road, 1.2 miles southwest on Hubb Kelley Road, 30 feet north of road; elevation 320 feet; Lucknow, S.C., 7.5-minute topographic quadrangle; lat. 34 degrees 18 minutes 24 seconds N. and long. 80 degrees 18 minutes 40 seconds W.

A—0 to 10 inches; brown (10YR 5/3) sand; weak fine granular structure; very friable; nonsticky, nonplastic; many fine and medium roots; very strongly acid; clear wavy boundary.
E1—10 to 27 inches; brownish yellow (10YR 6/6) sand; single grain; loose; nonsticky, nonplastic; common fine and medium and few coarse roots; few clean sand grains; strongly acid; gradual wavy boundary.
E2—27 to 44 inches; strong brown (7.5YR 5/8) sand; single grain; loose; nonsticky, nonplastic; common fine and medium and few coarse roots; few clean sand grains; very strongly acid; gradual wavy boundary.
E3—44 to 49 inches; brownish yellow (10YR 6/6) sand; single grain; loose; nonsticky, nonplastic; few fine and medium roots; very strongly acid; gradual wavy boundary.
E and Bt—49 to 80 inches; 90 percent very pale brown (10YR 7/3) sand; single grain; loose; nonsticky, nonplastic (E part); 10 percent yellowish brown (10YR 5/6) loamy sand lamellae about 0.4 inches thick; sand grains in lamellae are coated; lamellae are about 4 inches apart (Bt part); few fine and medium roots; very strongly acid.

Range in Characteristics

Thickness of sandy surface and underlying materials: More than 80 inches
Depth to lamellae: More than 47 inches
Soil reaction: Very strongly acid to slightly acid throughout, except where lime has been applied
Depth to bedrock: More than 80 inches
Depth to seasonal high water table: More than 6.0 feet

A or Ap horizon:
Color—hue of 10YR, value of 3 to 5, and chroma of 2 or 3
Texture—sand

E horizon:
Color—hue of 7.5YR or 10YR, value of 5 to 7, and chroma of 3 to 8
Texture—sand

E part of the E and Bt horizon:
Color—hue of 7.5YR or 10YR, value of 5 to 8, and chroma of 3 to 6
Texture—sand

Bt part of the E and Bt horizon:
Color—hue of 7.5YR or 10YR, value of 5 to 7, and chroma of 4 to 8
Texture—loamy sand

Autryville Series

Major land resource area: Southern Coastal Plain
Geomorphic setting: Marine terraces on middle coastal plains
Parent material: Loamy fluviomarine deposits
Drainage class: Well drained
Slowest saturated hydraulic conductivity: Moderately high
Depth class: Very deep
Slope: 0 to 4 percent
Commonly associated soils: Lucknow, Bonneau, Noboco, Rains, and Wagram

Taxonomic Classification

Loamy, siliceous, subactive, thermic Arenic Paleudults

Typical Pedon

Autryville sand in an area of Autryville sand, 0 to 4 percent slopes; in Lee County, S.C., 4.0 miles southwest on Sumter Highway from its intersection with St. Charles Road in Bishopville, 0.1 mile east on Houck Drive, 0.1 mile south on Ace Drive, 100 feet east of Ace Drive; elevation 217 feet; Bishopville West, S.C., 7.5-minute topographic quadrangle; lat. 34 degrees 09 minutes 35 seconds N. and long. 80 degrees 17 minutes 57 seconds W.

Ap—0 to 11 inches; olive brown (2.5Y 4/3) sand; single grain; loose; nonsticky, nonplastic; many fine roots; many fine pores; strongly acid; clear smooth boundary.
E—11 to 21 inches; olive yellow (2.5Y 6/6) sand; single grain; loose; nonsticky, nonplastic; many fine roots; many fine pores; moderately acid; clear wavy boundary.
Bt—21 to 31 inches; yellowish brown (10YR 5/6) sandy loam; weak medium subangular blocky structure; very friable; nonsticky, nonplastic; few fine roots; few fine pores; common distinct clay bridges between sand grains; moderately acid; clear wavy boundary.
E´—31 to 51 inches; brownish yellow (10YR 6/8) loamy sand; single grain; loose; nonsticky, nonplastic; very strongly acid; clear wavy boundary.
B´tg—51 to 80 inches; gray (2.5Y 6/2) sandy clay loam; moderate medium subangular blocky structure; friable; slightly sticky, slightly plastic; common distinct clay films on faces of peds; many medium faint pale brown (10YR 6/3) iron depletions; many coarse prominent yellowish red (5YR 5/6) masses of oxidized iron; less than five percent ironstone nodules; very strongly acid.

Range in Characteristics

Thickness of sandy surface and subsurface layers: 20 to 40 inches
Depth to top of argillic horizon: 20 to 40 inches
Depth to base of argillic horizon: More than 60 inches
Soil reaction: Very strongly acid to moderately acid throughout, except where lime has been applied
Depth to bedrock: More than 80 inches
Depth to seasonal high water table: 4.0 to 6.0 feet
Other distinctive properties: Sandy E´ horizons between a depth of 26 and 40 inches

A or Ap horizon:
Color—hue of 10YR or 2.5Y, value of 4 to 6, and chroma of 2 or 3
Texture—sand
Content and size of rock fragments—0 to 7 percent; mostly quartz pebbles

E horizon:
Color—hue of 10YR or 2.5Y, value of 6 or 7, and chroma of 4 to 8
Texture—sand

Bt horizon:
Color—hue of 10YR, value of 4 or 5, and chroma of 6 or 8
Texture—sandy loam, fine sandy loam, or sandy clay loam

E´ horizon:
Color—hue of 10YR, value of 6 or 7, and chroma of 4 to 8
Texture—sand or loamy sand

B´t horizon:
Color—hue of 10YR or 2.5Y, value of 5 or 6, and chroma of 4 to 8
Texture—sandy loam, fine sandy loam, or sandy clay loam
Redoximorphic features—iron or clay depletions in shades of gray and masses of oxidized iron in shades of red and yellow

B´tg horizon (where present):
Color—hue of 10YR or 2.5Y, value of 6 or 7, and chroma of 1 or 2
Texture—sandy clay loam
Redoximorphic features—masses of oxidized iron in shades of red and yellow

Barnwell Series

Major land resource area: Southern Coastal Plain
Geomorphic setting: Marine terraces on middle and upper coastal plains
Parent material: Loamy fluviomarine deposits
Drainage class: Well drained
Slowest saturated hydraulic conductivity: Moderately high
Depth class: Very deep
Slope: 0 to 10 percent
Commonly associated soils: Ailey, Cowarts, Dothan, Fuquay, Norfolk, and Troup

Taxonomic Classification

Fine-loamy, kaolinitic, thermic Typic Kanhapludults (fig. 16)

Typical Pedon

Barnwell loamy coarse sand in an area of Barnwell loamy coarse sand, 2 to 6 percent slopes; in Lee County, S.C., 2.4 miles north on Johnsons Pond Road from its intersection with Camden Highway, 330 feet northeast of the intersection of Johnsons Pond Road and Berry Road; elevation 305 feet; Lucknow, S.C., 7.5-minute topographic quadrangle; lat. 34 degrees 15 minutes 25 seconds N. and long. 80 degrees 21 minutes 32 seconds W.

Ap—0 to 7 inches; dark brown (10YR 3/3) loamy coarse sand; weak medium granular structure; very friable; nonsticky, nonplastic; few very fine and fine roots throughout; strongly acid; abrupt wavy boundary.

E—7 to 11 inches; light yellowish brown (10YR 6/4) sand; single grain; loose; nonsticky, nonplastic; few very fine and fine roots throughout; strongly acid; abrupt wavy boundary.

Bt1—11 to 36 inches; yellowish brown (10YR 5/6) sandy clay loam; moderate medium subangular blocky structure; friable; slightly sticky, slightly plastic; few fine roots throughout; few fine pores; common distinct clay films on faces of peds; few medium and coarse distinct rounded yellowish red (5YR 5/8) masses of oxidized iron; very strongly acid; gradual wavy boundary.

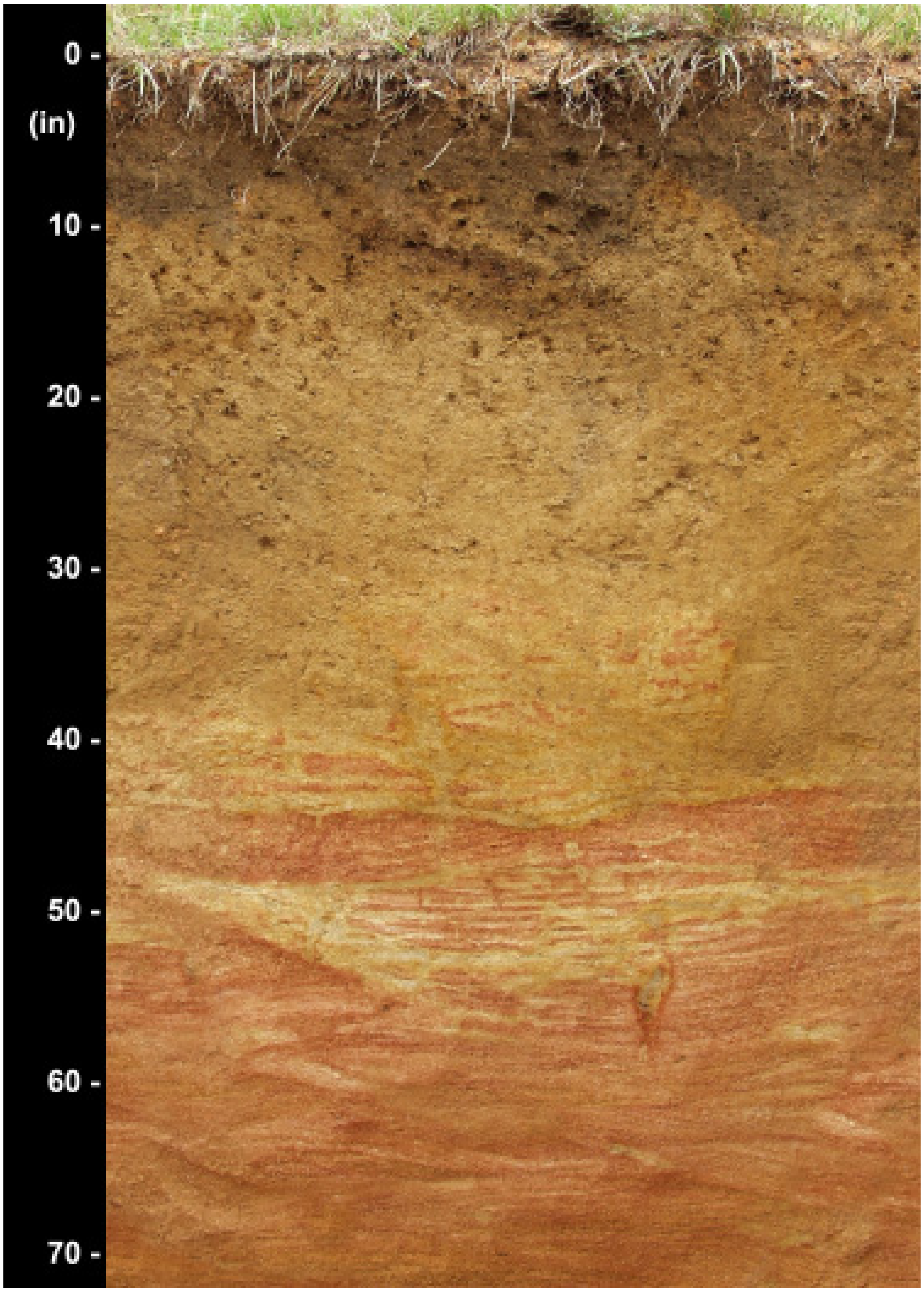

Figure 16.—Profile of a soil in the Barnwell series.

Bt2—36 to 44 inches; yellowish brown (10YR 5/6) clay; moderate medium subangular blocky structure; friable; slightly sticky, slightly plastic; few fine roots throughout; many distinct clay films on faces of peds; common fine, medium, and coarse prominent rounded and platy red (2.5YR 5/6) masses of oxidized iron; very strongly acid; gradual wavy boundary.

Bt3—44 to 50 inches; yellowish brown (10YR 5/6) clay; moderate medium subangular blocky structure; friable; slightly sticky, slightly plastic; few fine roots throughout;

many distinct clay films on faces of peds; common fine prominent light gray (2.5Y 7/2) iron depletions; common medium and coarse distinct rounded yellowish red (5YR 4/6), common medium distinct yellowish red (5YR 5/8), and faint strong brown (7.5YR 5/8) masses of oxidized iron; very strongly acid; abrupt irregular boundary

2BCd—50 to 56 inches; dark red (2.5YR 4/8) sandy clay loam; weak medium subangular blocky structure; firm; slightly sticky, slightly plastic; few fine pores; few distinct clay bridges between sand grains; few white (10YR 8/1) masses of kaolin; extremely acid; gradual wavy boundary.

2C—56 to 80 inches; red (2.5YR 6/8) sandy clay loam; massive; friable; slightly sticky, slightly plastic; few, 1 to 4 mm, white (10YR 8/1) masses of kaolin; few fine flakes of mica; common coarse prominent yellow (10YR 7/8) masses of oxidized iron; very strongly acid.

Range in Characteristics

Thickness of sandy surface and subsurface layers: 3 to 19 inches
Depth to top of argillic horizon: 3 to 19 inches
Depth to base of argillic horizon: 35 to 80 inches
Depth to top of kandic horizon: 3 to 19 inches
Depth to contrasting soil material (lithologic discontinuity): 35 to more than 80 inches
Depth to densic materials: 40 to more than 60 inches
Soil reaction: Extremely acid to strongly acid throughout, except where lime has been applied
Mica content: 0 to 20 percent
Depth to bedrock: More than 80 inches
Depth to seasonal high water table: 3.3 to 5.0 feet

A or Ap horizon:
Color—hue of 10YR or 2.5Y, value of 3 to 6, and chroma of 2 to 4
Texture—sand, loamy coarse sand, or loamy sand; eroded areas are sandy loam or sandy clay loam
Content and size of rock fragments—0 to 12 percent; mostly quartz pebbles and ironstone nodules

E horizon (where present):
Color—hue of 10YR or 2.5Y, value of 5 to 7, and chroma of 3 or 4
Texture—sand, loamy coarse sand, or loamy sand
Content and size of rock fragments—0 to 12 percent; mostly quartz pebbles and ironstone nodules

Bt horizon:
Color—hue of 7.5YR or 10YR, value of 5 or 6, and chroma of 6 or 8
Texture—sandy loam, sandy clay loam, clay loam, or clay
Content and size of rock fragments—0 to 14 percent; mostly ironstone nodules
Redoximorphic features (where present)—iron depletions in shades of gray and masses of oxidized iron in shades of red, yellow, and brown

BC, 2BC, BCd, or 2BCd horizon:
Color—hue of 2.5YR to 10YR, value of 4 to 7, and chroma of 6 or 8
Texture—loamy sand, sandy loam, or sandy clay loam
Content and size of rock fragments—0 to 14 percent; mostly ironstone nodules
Redoximorphic features (where present)—iron depletions in shades of gray and masses of oxidized iron in shades of red, yellow, and brown
Other distinctive properties—0 to 20 percent, 1 to 20 mm, white noncemented masses of kaolin

C or 2C horizon:
Color—hue of 2.5YR to 2.5Y, value of 5 to 8, and chroma of 1 to 8
Texture—loamy sand, sandy loam, sandy clay loam, clay, or silty clay loam
Content and size of rock fragments—0 to 14 percent; mostly ironstone nodules
Redoximorphic features (where present)—iron depletions in shades of gray and masses of oxidized iron in shades of red, yellow, and brown
Other distinctive properties—0 to 20 percent, 1 to 20 mm, white noncemented masses of kaolin

Bonneau Series

Major land resource area: Southern Coastal Plain
Geomorphic setting: Marine terraces on middle coastal plains
Parent material: Loamy fluviomarine deposits
Drainage class: Well drained
Slowest saturated hydraulic conductivity: Moderately high
Depth class: Very deep
Slope: 0 to 6 percent
Commonly associated soils: Lucknow, Coxville, Noboco, Norfolk, and Rains

Taxonomic Classification

Loamy, siliceous, subactive, thermic Arenic Paleudults

Typical Pedon

Bonneau sand in an area of Bonneau sand, 0 to 6 percent slopes; in Lee County, S.C., 3.1 miles north on Ashland-Stokes Bridge Road from its intersection with Hartsville Highway, 1.2 miles east on Una Road, 1.2 miles north on Alexander Store Road, 0.8 mile east on Rodgers Road, 0.2 mile northeast on Sparrow Swamp Road, 150 feet south of road; elevation 210 feet; Kellytown, S.C., 7.5-minute topographic quadrangle; lat. 34 degrees 18 minutes 44 seconds N. and long. 80 degrees 10 minutes 08 seconds W.

Ap—0 to 8 inches; dark grayish brown (10YR 4/2) sand; single grain; loose; nonsticky, nonplastic; common fine roots throughout; slightly acid; abrupt smooth boundary.
E—8 to 24 inches; light yellowish brown (10YR 6/4) sand; single grain; loose; nonsticky, nonplastic; few very fine roots throughout; moderately acid; abrupt wavy boundary.
Bt1—24 to 41 inches; yellowish brown (10YR 5/6) sandy clay loam; moderate medium subangular blocky structure; friable; slightly sticky, slightly plastic; common distinct clay films on faces of peds; moderately acid; gradual wavy boundary.
Bt2—41 to 51 inches; yellowish brown (10YR 5/6) sandy clay loam; moderate medium subangular blocky structure; friable; slightly sticky, slightly plastic; common distinct clay films on faces of peds; common medium distinct strong brown (7.5YR 5/8) masses of oxidized iron; strongly acid; gradual wavy boundary.
Bt3—51 to 80 inches; yellowish brown (10YR 5/6) sandy clay loam; moderate medium subangular blocky structure; friable; slightly sticky, slightly plastic; common distinct clay films on faces of peds; light gray (10YR 7/1) iron depletions; common medium prominent yellowish red (5YR 5/8) masses of oxidized iron; strongly acid.

Range in Characteristics

Thickness of sandy surface and subsurface layers: 20 to 40 inches
Depth to top of argillic horizon: 20 to 40 inches
Depth to base of argillic horizon: 60 to 80 inches

Soil reaction: Very strongly acid to moderately acid throughout, except where lime has been applied
Depth to bedrock: More than 80 inches
Depth to seasonal high water table: 3.5 to 5.0 feet

A or Ap horizon:
Color—hue of 10YR or 2.5Y, value of 3 to 5, and chroma of 2 to 4
Texture—sand or fine sand

E horizon:
Color—hue of 10YR or 2.5Y, value of 6 or 7, and chroma of 3 or 4
Texture—sand or fine sand

Bt horizon (upper part):
Color—hue of 10YR or 2.5Y, value of 5 or 6, and chroma of 4 to 8
Texture—sandy loam or sandy clay loam

Bt horizon (lower part):
Color—hue of 10YR or 2.5Y, value of 5 or 6, and chroma of 4 to 8
Texture—sandy loam or sandy clay loam
Redoximorphic features—iron or clay depletions in shades of gray and masses of oxidized iron in shades of red, yellow, and brown

Btg horizon (where present):
Color—hue of 10YR or 2.5Y, value of 6 or 7, and chroma of 1 or 2
Texture—sandy clay loam or sandy clay
Redoximorphic features—iron or clay depletions in shades of gray and masses of oxidized iron in shades of red, yellow, and brown

Butters Series

Major land resource area: Southern Coastal Plain
Geomorphic setting: Marine terraces on middle coastal plains
Parent material: Loamy fluviomarine deposits
Drainage class: Well drained
Slowest saturated hydraulic conductivity: Moderately high
Depth class: Very deep
Slope: 0 to 2 percent
Commonly associated soils: Alaga, Autryville, Bonneau, Lucknow, and Rains

Taxonomic Classification

Coarse-loamy, siliceous, subactive, thermic Typic Paleudults

Typical Pedon

Butters coarse sand in an area of Butters coarse sand, 0 to 2 percent slopes; in Lee County, S.C., 4.8 miles southwest on Sumter Highway from its intersection with St. Charles Road in Bishopville, 0.95 mile southeast on Manville-St. Charles Road, 0.3 mile northeast on unimproved road, 120 feet north of lane; elevation 220 feet; Bishopville West, S.C., 7.5-minute topographic quadrangle; lat. 34 degrees 08 minutes 43 seconds N. and long. 80 degrees 17 minutes 03 seconds W.

Ap—0 to 9 inches; olive brown (2.5Y 4/3) coarse sand; single grain; loose; nonsticky, nonplastic; many fine roots; strongly acid; clear smooth boundary.
E—9 to 12 inches; light olive brown (2.5Y 6/4) loamy sand; single grain; loose; nonsticky, nonplastic; many fine roots; strongly acid; clear wavy boundary.

Bt1—12 to 24 inches; dark yellowish brown (10YR 4/6) sandy loam; weak medium subangular blocky structure; very friable; nonsticky, nonplastic; common distinct clay bridges between sand grains; very strongly acid; clear wavy boundary.

Bt2—24 to 30 inches; yellowish brown (10YR 5/6) coarse sandy loam; weak medium subangular blocky structure; very friable; nonsticky, nonplastic; common distinct clay bridges between sand grains; very strongly acid; clear wavy boundary.

E´—30 to 49 inches; olive yellow (2.5Y 6/8) loamy sand; single grain; loose; nonsticky, nonplastic; very strongly acid; clear wavy boundary.

B´t1—49 to 55 inches; brownish yellow (10YR 6/6) sandy loam; weak medium subangular blocky structure; friable; nonsticky, nonplastic; few faint clay films on faces of peds; few fine distinct strong brown (7.5YR 5/8) masses of oxidized iron; very strongly acid; clear wavy boundary.

B´t2—55 to 68 inches; light yellowish brown (10YR 6/4) sandy clay loam; moderate medium subangular blocky structure; friable; slightly sticky, slightly plastic; few faint clay films on faces of peds; common medium prominent yellowish red (5YR 5/8) masses of oxidized iron; very strongly acid; clear wavy boundary.

B´t3—68 to 80 inches; yellowish brown (10YR 5/4) sandy clay loam; moderate medium subangular blocky structure; friable; slightly sticky, slightly plastic; few faint clay films on faces of peds; 2 percent rounded plinthite nodules; common medium prominent gray (10YR 6/1) iron depletions; many coarse prominent yellowish red (5YR 5/8) masses of oxidized iron; very strongly acid.

Range in Characteristics

Thickness of sandy surface and subsurface layers: 6 to 19 inches
Depth to top of argillic horizon: 6 to 19 inches
Depth to base of argillic horizon: More than 60 inches
Soil reaction: Very strongly acid or strongly acid throughout, except where lime has been applied
Depth to bedrock: More than 80 inches
Depth to seasonal high water table: 4.0 to 5.0 feet
Other distinctive properties: Sandy E´ horizon between a depth of 35 and 50 inches

A or Ap horizon:
Color—hue of 10YR or 2.5Y, value of 4 to 6, and chroma of 2 or 3
Texture—coarse sand or sand
Content and size of rock fragments—0 to 3 percent; mostly quartz pebbles

E horizon:
Color—hue of 10YR or 2.5Y, value of 6 or 7, and chroma of 4 or 6
Texture—sand or loamy sand
Content and size of rock fragments—0 to 3 percent; mostly quartz pebbles

Bt horizon:
Color—hue of 10YR or 2.5Y, value of 4 or 5, and chroma of 6 or 8
Texture—coarse sandy loam or sandy loam
Content and size of rock fragments—0 to 3 percent; mostly quartz pebbles

E´ horizon:
Color—hue of 10YR or 2.5Y, value of 6 or 7, and chroma of 4 to 8
Texture—sand or loamy sand
Content and size of rock fragments—0 to 3 percent; mostly quartz pebbles

B´t horizon:
Color—hue of 10YR, value of 5 or 6, and chroma of 3 to 8
Texture—sandy loam or sandy clay loam
Content and size of rock fragments—0 to 3 percent; mostly quartz pebbles

Redoximorphic features—iron or clay depletions in shades of gray and masses of oxidized iron in shades of red and yellow

B´tg horizon (where present):

Color—hue of 10YR or 2.5Y, value of 5 to 7, and chroma of 1 or 2
Texture—sandy loam or sandy clay loam
Content and size of rock fragments—0 to 3 percent; mostly quartz pebbles
Redoximorphic features—masses of oxidized iron in shades of red and yellow

Candor series

Major land resource area: Carolina and Georgia Sand Hills and Southern Coastal Plain
Geomorphic setting: Sand sheets on sandhills
Parent material: Eolian sands
Drainage class: Somewhat excessively drained
Slowest saturated hydraulic conductivity: Moderately high
Depth class: Very deep
Slope: 0 to 6 percent
Commonly associated soils: Ailey, Alpin, Lucknow, Cowarts, Fuquay, Troup, and Wagram

Taxonomic Classification

Sandy, siliceous, thermic Grossarenic Kandiudults

Typical Pedon

Candor sand in an area of Candor sand, 0 to 6 percent slopes; in Lee County, S.C., 1.25 miles west on Lucknow Road from its intersection with Bethune Highway, 0.7 mile south on an unimproved road, 0.7 mile south, 0.1 mile east, 0.2 mile northeast, 0.05 mile north, 0.1 mile east on woodland road, 75 feet north of road; elevation 257 feet; Lucknow, S.C., 7.5-minute topographic quadrangle; lat. 34 degrees 19 minutes 26 seconds N. and long. 80 degrees 18 minutes 47 seconds W.

Ap—0 to 8 inches; brown (10YR 4/3) sand; single grain; loose; nonsticky, nonplastic; many fine roots; strongly acid; abrupt wavy boundary.
E—8 to 25 inches; very pale brown (10YR 7/4) coarse sand; single grain; loose; nonsticky, nonplastic; many fine roots; strongly acid; gradual wavy boundary.
Bt—25 to 36 inches; yellowish brown (10YR 5/6) loamy sand; weak fine subangular blocky structure; very friable; nonsticky, nonplastic; common distinct clay bridges between sand grains; very strongly acid; gradual wavy boundary.
E´1—36 to 53 inches; light yellowish brown (10YR 6/4) coarse sand; single grain; loose; nonsticky, nonplastic; very strongly acid; gradual wavy boundary.
E´2—53 to 61 inches; brownish yellow (10YR 6/6) coarse sand; single grain; loose; very friable; nonsticky, nonplastic; common distinct clay bridges between sand grains; very strongly acid; gradual wavy boundary.
B´t2—61 to 70 inches; brownish yellow (10YR 6/6) coarse sandy loam; weak medium subangular blocky structure; very friable; nonsticky, nonplastic; common distinct clay bridges between sand grains; few medium faint brownish yellow (10YR 6/8) and few medium prominent yellowish red (5YR 5/8) masses of oxidized iron; very strongly acid; gradual wavy boundary.
B´t3—70 to 80 inches; brownish yellow (10YR 6/8) sandy clay loam; weak medium subangular blocky structure; friable; slightly sticky, slightly plastic; common distinct clay films on faces of peds; few medium faint strong brown (7.5YR 6/8) and few medium distinct yellowish red (5YR 5/8) masses of oxidized iron; very strongly acid.

Range in Characteristics

Thickness of sandy surface and subsurface layers: 20 to 40 inches
Depth to top of argillic horizon: 20 to 40 inches
Depth to base of argillic horizon: More than 60 inches
Depth to top of kandic horizon: 40 to 74 inches
Soil reaction: Extremely acid to strongly acid throughout, except where lime has been applied.
Mica content: 0 to less than 20 percent
Depth to bedrock: More than 80 inches
Depth to seasonal high water table: 4.0 to 6.0 feet
Other distinctive properties: Sandy E´ horizons between a depth of 26 and 74 inches

A or Ap horizon:
Color—hue of 10YR, value of 4 or 5, and chroma of 2 or 3
Texture—coarse sand or sand
Content and size of rock fragments—0 to 2 percent; mostly quartz pebbles

E horizon:
Color—hue of 10YR, value of 5 to 7, and chroma of 3 to 6
Texture—coarse sand or sand
Content and size of rock fragments—0 to 2 percent; mostly quartz pebbles

Bt horizon:
Color—hue of 7.5YR or 10YR, value of 5 or 6, and chroma of 4 to 8
Texture—loamy coarse sand or loamy sand
Content and size of rock fragments—0 to 2 percent; mostly quartz pebbles

E´ horizon:
Color—hue of 7.5YR or 10YR, value of 5 to 8, and chroma of 3 to 8
Texture—coarse sand or sand
Content and size of rock fragments—0 to 2 percent; mostly quartz pebbles

B´t horizon:
Color—hue of 7.5YR or 10YR, value of 5 or 6, and chroma of 4 to 8
Texture—coarse sandy loam, sandy loam, fine sandy loam, or sandy clay loam
Content and size of rock fragments—0 to 2 percent; mostly quartz pebbles
Redoximorphic features (where present)—iron or clay depletions in shades of gray and masses of oxidized iron in shades of red, yellow, and brown

Chastain Series

Major land resource area: Southern Coastal Plain
Geomorphic setting: Flood plains in river valleys
Parent material: Clayey alluvium
Drainage class: Poorly drained
Slowest saturated hydraulic conductivity: Moderately low
Depth class: Very deep
Slope: 0 to 2 percent
Commonly associated soils: Alaga, Chewacla, Eunola, and Johns

Taxonomic Classification

Fine, mixed, semiactive, acid, thermic Fluvaquentic Endoaquepts

Typical Pedon

Chastain loam in an area of Chastain-Chewacla complex, 0 to 2 percent slopes, frequently flooded; in Lee County, S.C., 1.45 miles west from the entrance to Lee State

Natural Area, 1.45 miles west on Loop Road, 100 feet south of Loop Road; elevation 155 feet; Bishopville East, S.C., 7.5-minute topographic quadrangle; lat. 34 degrees 11 minutes 38 seconds N. and long. 80 degrees 11 minutes 32 seconds W.

A—0 to 4 inches; very dark grayish brown (10YR 3/2) loam; weak fine granular structure; very friable; nonsticky, nonplastic; many fine and medium roots; common fine and medium pores; strongly acid; clear smooth boundary.

Bg1—4 to 25 inches; dark gray (10YR 4/1) clay; weak medium subangular blocky structure; friable; moderately sticky, moderately plastic; few fine roots; common fine pores; common fine prominent strong brown (7.5YR 5/8) masses of oxidized iron; very strongly acid; gradual wavy boundary.

Bg2—25 to 45 inches; gray (10YR 6/1) clay; weak medium subangular blocky structure; very firm; moderately sticky, moderately plastic; few fine roots; common fine prominent olive yellow (2.5Y 6/8) masses of oxidized iron; very strongly acid; gradual smooth boundary.

Bg3—45 to 56 inches; neutral (N 6/0) clay; weak medium subangular blocky structure; very firm; moderately sticky, moderately plastic; few fine prominent olive yellow (2.5Y 6/8) masses of oxidized iron; very strongly acid; gradual wavy boundary.

2Cg—56 to 80 inches; 50 percent light gray (10YR 6/1) and 50 percent light gray (10YR 7/1) sand; single grain; loose; nonsticky, nonplastic; 5 percent quartz pebbles; very strongly acid.

Range in Characteristics

Thickness of surface layer: 2 to 12 inches
Depth to top of cambic horizon: 2 to 12 inches
Depth to base of cambic horizon: 20 to more than 60 inches
Depth to contrasting soil material (lithologic discontinuity): 40 to more than 60 inches
Soil reaction: Very strongly acid to moderately acid throughout, except where lime has been applied
Depth to bedrock: More than 80 inches
Depth to seasonal high water table: At the surface to a depth of 1.0 foot

A horizon:
Color—hue of 7.5YR or 10YR, value of 2 to 6, and chroma of 1 or 2
Texture—loam

Bg horizon:
Color—hue of 10YR or 2.5Y, value of 4 to 7, and chroma of 1 or 2; or is neutral and has value of 4 to 7
Texture—clay loam or clay
Redoximorphic features—masses of oxidized iron in shades of red, yellow, and brown

2Cg horizon:
Color—hue of 10YR or 2.5Y, value of 4 to 7, and chroma of 1 or 2; or is neutral and has value of 4 to 7
Texture—sand
Content and size of rock fragments—0 to 8 percent; mostly quartz pebbles
Redoximorphic features (where present)—masses of oxidized iron in shades of red, yellow, and brown

Chewacla Series

Major land resource area: Southern Coastal Plain
Geomorphic setting: Flood plains in river valleys
Parent material: Loamy alluvium

Drainage class: Somewhat poorly drained
Slowest saturated hydraulic conductivity: Moderately high
Depth class: Very deep
Slope: 0 to 2 percent
Commonly associated soils: Alaga, Chastain, Eunola, and Johns

Taxonomic Classification

Fine-loamy, mixed, active, thermic Fluvaquentic Dystrudepts

Typical Pedon

Chewacla loam in an area Chewacla-Chastain complex, 0 to 2 percent slopes, frequently flooded; in Lee County, S.C., 5.3 miles east on East Church Street from its intersection with South Main Street in Bishopville, 2.3 miles southeast on Wisacky Highway, 1.7 miles northeast on Fields Bridge Road, 75 feet northeast on field road, 50 feet east into woods; elevation 150 feet; Bishopville East, S.C., 7.5-minute topographic quadrangle; lat. 34 degrees 10 minutes 10 seconds N. and long. 80 degrees 10 minutes 37 seconds W.

A—0 to 1 inches; brown (10YR 4/3) loam; strong fine granular structure; friable; nonsticky, nonplastic; many fine and few medium roots; common fine pores; very strongly acid; clear wavy boundary.

Bw1—1 to 8 inches; yellowish brown (10YR 5/4) loam; strong medium subangular blocky structure; friable; slightly sticky, slightly plastic; common fine roots; common fine pores; few fine prominent black (10YR 2/1) masses of manganese accumulation; few fine flakes of mica; common medium faint light olive brown (2.5Y 5/3) iron depletions; few medium distinct dark brown (7.5YR 3/4) masses of oxidized iron; very strongly acid; gradual wavy boundary.

Bw2—8 to 16 inches; light olive brown (2.5Y 5/4) loam; moderate medium subangular blocky structure; friable; slightly sticky, slightly plastic; few fine roots; common fine pores; few fine flakes of mica; common medium distinct grayish brown (2.5Y 5/2) iron depletions; common medium prominent brownish yellow (10YR 6/8) masses of oxidized iron; very strongly acid; gradual wavy boundary.

Bw3—16 to 38 inches; brownish yellow (10YR 6/6) sandy clay loam; moderate medium subangular blocky structure; friable; slightly sticky, slightly plastic; few fine roots; common fine pores; common fine flakes of mica; common medium prominent light grayish brown (10YR 6/2) and gray (10YR 6/1) iron depletions; common medium distinct brownish yellow (10YR 6/8) masses of oxidized iron; strongly acid; gradual wavy boundary.

Bg1—38 to 49 inches; gray (10YR 6/1) sandy clay loam; weak medium subangular blocky structure; friable; slightly sticky, slightly plastic; few fine roots; common fine and medium pores; common fine flakes of mica; common medium prominent brownish yellow (10YR 6/6) and reddish brown (7.5YR 6/8) masses of oxidized iron; strongly acid; gradual wavy boundary.

Bg2—49 to 62 inches; gray (10YR 6/1) clay loam with 4-inch layer of gray (10YR 5/1) sandy clay loam; weak medium subangular blocky structure; friable; slightly sticky, slightly plastic; common fine flakes of mica; common clean sand grains; strongly acid.

2Cg—62 to 80 inches; gray (10YR 5/1) sand with 4-inch layer of very dark grayish brown (10YR 3/2) sand; single grain; loose; nonsticky, nonplastic; common fine flakes of mica; common uncoated sand grains; strongly acid.

Range in Characteristics

Thickness of surface layer: 4 to 10 inches
Depth to top of cambic horizon: 4 to 10 inches
Depth to base of cambic horizon: 10 to more than 60 inches

Depth to contrasting soil material (lithologic discontinuity): 40 to more than 60 inches
Soil reaction: Very strongly acid or strongly acid throughout, except where lime has been applied
Depth to bedrock: More than 80 inches
Depth to seasonal high water table: 0.5 to 2.0 feet

A or Ap horizon:
Color—hue of 10YR or 2.5Y, value of 3 to 5, and chroma of 1 to 4
Texture—loam
Content and size of rock fragments—0 to 3 percent; mostly quartz pebbles

Bw horizon:
Color—hue of 10YR or 2.5Y, value of 4 to 7, and chroma of 3 to 8
Texture—sandy loam, fine sandy loam, loam, sandy clay loam, silt loam, or silty clay loam
Content and size of rock fragments—0 to 3 percent; mostly quartz pebbles
Redoximorphic features—iron or clay depletions in shades of gray and masses of oxidized iron in shades of red, yellow, and brown

Bg horizon (where present):
Color—hue of 10YR or 2.5Y, value of 4 to 7, and chroma of 1 or 2
Texture—sandy loam, fine sandy loam, sandy clay loam, loam, silt loam, silty clay loam, or clay loam
Content and size of rock fragments—0 to 3 percent; mostly quartz pebbles
Redoximorphic features—masses of oxidized iron in shades of red, yellow, and brown

C, 2C, Cg, or 2Cg horizon:
Color—hue of 10YR or 2.5Y, value of 4 to 7, and chroma of 1 to 8
Texture—stratified sand, loamy sand, sandy loam, or sandy clay loam
Content and size of rock fragments—0 to 3 percent; mostly quartz pebbles
Redoximorphic features (where present)—masses of oxidized iron in shades of red, yellow, and brown

Cowarts Series

Major land resource area: Carolina and Georgia Sand Hills and Southern Coastal Plain
Geomorphic setting: Marine terraces on upper coastal plains
Parent material: Loamy fluviomarine deposits
Drainage class: Well drained
Slowest saturated hydraulic conductivity: Low
Depth class: Very deep
Slope: 6 to 15 percent
Commonly associated soils: Ailey, Alpin, Candor, Dothan, Pelion, Troup, and Vaucluse

Taxonomic Classification

Fine-loamy, kaolinitic, thermic Typic Kanhapludults

Typical Pedon

Cowarts loamy sand in an area of Cowarts-Vaucluse complex, 10 to 15 percent slopes; in Darlington County, S.C., 0.6 mile north on Patrick Highway from its junction with Old Camden Road, 1.4 miles northwest on Underground Branch Road, 0.3 mile south then 0.4 mile west on unpaved road, 150 feet north; elevation 350 feet; Hartsville North, S.C., 7.5-minute topographic quadrangle; lat. 34 degrees 28 minutes 53 seconds N. and long. 80 degrees 03 minutes 28 seconds W.

Ap—0 to 6 inches; grayish brown (10YR 5/2) loamy sand; weak fine granular structure; friable; nonsticky, nonplastic; common fine and few medium roots throughout; few very fine pores; very strongly acid; clear smooth boundary.

Bt1—6 to 10 inches; brownish yellow (10YR 6/6) sandy clay loam; weak fine subangular blocky structure; friable; slightly sticky, slightly plastic; common fine and medium roots; few very fine pores; common distinct clay films on faces of peds; few medium distinct yellowish red (5YR 5/8) and yellow (10YR 7/8) masses of oxidized iron; very strongly acid; smooth wavy boundary.

Bt2—10 to 21 inches; brownish yellow (10YR 6/6) sandy clay loam; weak medium subangular blocky structure; friable in part of the mass, and brittle, compact, and dense in about 25 percent of the mass; few medium and coarse roots; 1-inch seam of pinkish gray (7.5YR 7/2) and white (10YR 8/1) sandy clay loam and sandy clay occurring in a vertical streak along a coarse root channel; few faint clay films on faces of peds; 1 percent ironstone nodules; few fine prominent light gray (10YR 8/1) masses of kaolin; common coarse prominent red (2.5YR 5/8) masses of oxidized iron; very strongly acid; gradual wavy boundary.

BC—21 to 29 inches; red (2.5YR 5/8) sandy clay loam; weak coarse subangular blocky structure; very friable; 1-inch seam of pinkish gray (7.5YR 7/2) and white (10YR 8/1) sandy clay loam and sandy clay occurring in a vertical streak along a coarse root channel; few clean sand grains; few white (10YR 8/1) masses of kaolin; common medium distinct yellow (10YR 6/8) masses of oxidized iron; very strongly acid; gradual wavy boundary.

C1—29 to 52 inches; reddish yellow (5YR 5/8) sandy loam; massive; friable; few coarse roots; 1-inch seam of pinkish gray (7.5YR 7/2) and white (10YR 8/1) sandy clay loam and sandy clay occurring in a vertical streak along a coarse root channel; few fine flakes of mica; few white (10YR 8/1) masses of kaolin; few medium distinct yellow (10YR 7/6) masses of oxidized iron; very strongly acid; gradual wavy boundary.

C2—52 to 80 inches; yellowish red (5YR 5/6) sandy loam and sandy clay loam; massive; very friable; few fine to coarse flakes of mica; few fine white (10YR 8/1) masses of kaolin; common medium distinct yellow (10YR 7/6) masses of oxidized iron; very strongly acid.

Range in Characteristics

Thickness of sandy surface and subsurface layers: 4 to 19 inches
Depth to top of argillic horizon: 4 to 19 inches
Depth to base of argillic horizon: 16 to 40 inches
Depth to top of kandic horizon: 4 to 19 inches
Depth to contrasting soil material (lithologic discontinuity): More than 40 inches
Depth to densic materials: 16 to more than 40 inches
Depth to fragic soil properties: 26 to 60 inches
Soil reaction: Very strongly acid or strongly acid throughout, except where lime has been applied
Mica content: 0 to less than 20 percent
Depth to bedrock: More than 80 inches
Depth to seasonal high water table: More than 6.0 feet

A or Ap horizon:
Color—hue of 10YR, value of 3 to 5, and chroma of 2 to 4
Texture—sand or loamy sand
Content and size of rock fragments—0 to 12 percent; mostly quartz pebbles and ironstone nodules

E horizon (where present):
Color—hue of 10YR, value of 4 to 7, and chroma of 4 to 7

Texture—sand or loamy sand
Content and size of rock fragments—0 to 12 percent; mostly quartz pebbles and ironstone nodules

Bt horizon:
Color—hue of 5YR to 10YR, value of 5 or 6, and chroma of 4 to 8
Texture—sandy loam or sandy clay loam
Content and size of rock fragments—0 to 6 percent; mostly ironstone nodules

BC horizon (where present):
Color—hue of 10R to 10YR, value of 4 to 8, and chroma of 3 to 8
Texture—sandy loam or sandy clay loam.
Content and size of rock fragments—0 to 6 percent; mostly ironstone nodules
Other distinctive properties—0 to 20 percent, 1 to 20 mm, white noncemented masses of kaolin

C or Cd horizon:
Color—hue of 10R to 10YR, value of 4 to 8, and chroma of 1 to 8
Texture—loamy sand, coarse sandy loam, sandy loam, or sandy clay loam
Content and size of rock fragments—0 to 6 percent; mostly ironstone nodules
Other distinctive properties—0 to 20 percent, 1 to 20 mm, white noncemented masses of kaolin

Coxville Series

Major land resource area: Southern Coastal Plain
Geomorphic setting: Carolina Bays and open and closed depressions on middle coastal plains
Parent material: Clayey fluviomarine deposits
Drainage class: Poorly drained
Slowest saturated hydraulic conductivity: Moderately high
Depth class: Very deep
Slope: 0 to 2 percent
Commonly associated soils: Goldsboro, Lynchburg, Noboco, Norfolk, and Rains

Taxonomic Classification

Fine, kaolinitic, thermic Typic Paleaquults (fig. 17)

Typical Pedon

Coxville sandy loam in an area of Coxville sandy loam, 0 to 2 percent slopes; in Lee County, S.C., 5.3 miles east on East Church Street from its intersection with South Main Street in Bishopville, 2.2 miles southeast on Wisacky Highway, 600 feet east on farm road, 400 feet north of road; elevation 190 feet; Bishopville East, S.C., 7.5-minute topographic quadrangle; lat. 34 degrees 09 minutes 34 seconds N. and long. 80 degrees 11 minutes 57 seconds W.

Ap—0 to 7 inches; dark gray (10YR 3/1) sandy loam; weak medium granular structure; friable; nonsticky, nonplastic; few fine roots; slightly acid; gradual wavy boundary.
Btg1—7 to 19 inches; gray (10YR 6/1) sandy clay; moderate medium subangular blocky structure; friable; slightly sticky, slightly plastic; few fine and very fine roots; common fine pores; few distinct clay films on faces of peds and on surfaces along root channels; few fine, medium, and coarse clean sand grains; common medium prominent brownish yellow (10YR 6/6) masses of oxidized iron; very strongly acid; gradual wavy boundary.

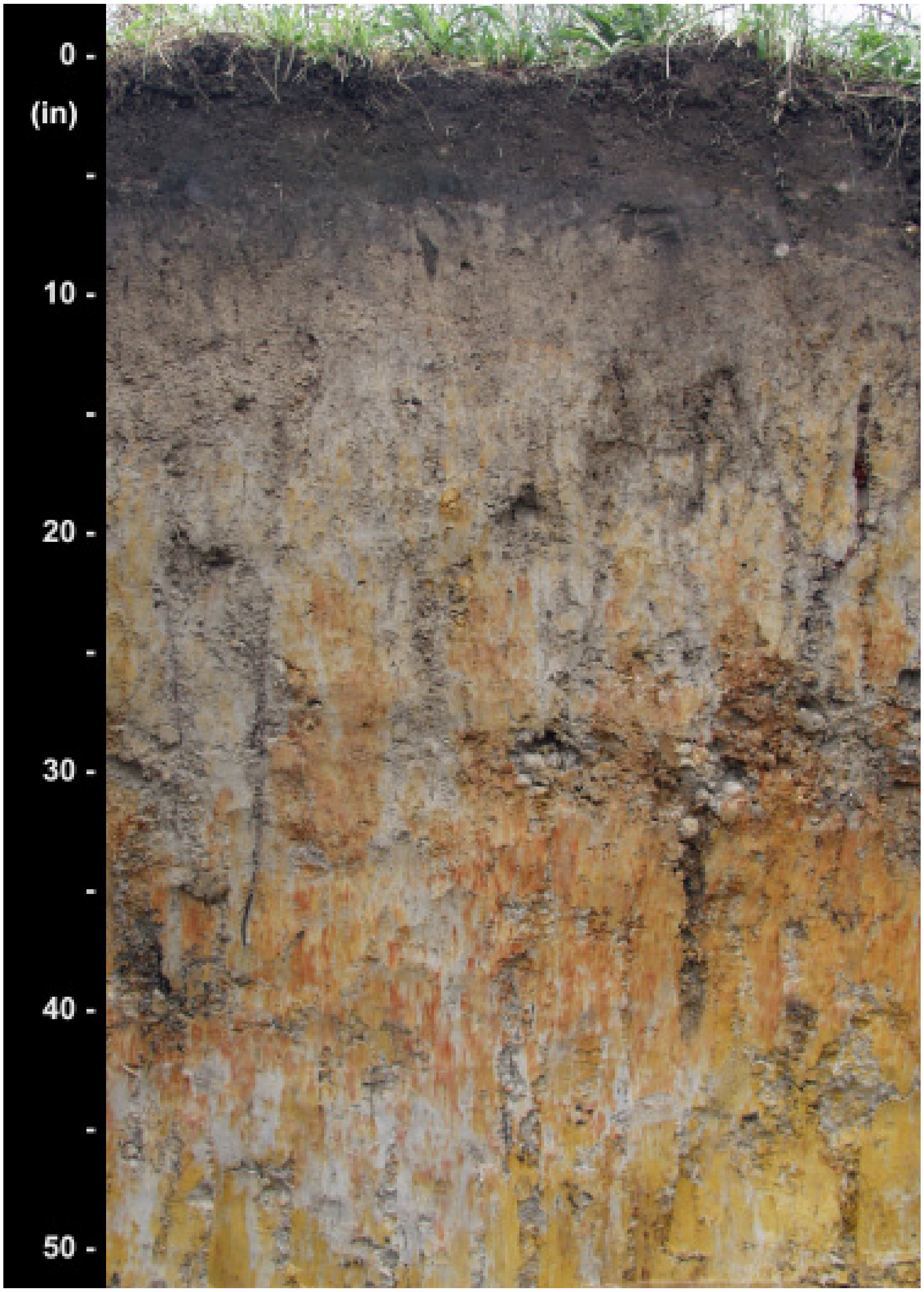

Figure 17.—Profile of a soil in the Coxville series.

Btg2—19 to 36 inches; gray (10YR 5/1) sandy clay; moderate medium subangular blocky structure; firm; slightly sticky, slightly plastic; few fine roots; common distinct clay films on faces of peds; common medium and coarse clean sand grains; common medium prominent red (2.5YR 4/8) and common medium distinct brownish yellow (10YR 6/8) masses of oxidized iron; very strongly acid; gradual wavy boundary.

Btg3—36 to 80 inches; gray (10YR 5/1) sandy clay; weak medium subangular blocky structure; firm; slightly sticky, slightly plastic; common distinct clay films on faces of peds; common medium and coarse clean sand grains; few fine prominent red (2.5YR 4/8) and few medium prominent reddish yellow (7.5YR 6/8) masses of oxidized iron; very strongly acid.

Range in Characteristics

Thickness of surface and subsurface layers: 5 to 19 inches
Depth to top of argillic horizon: 5 to 19 inches
Depth to base of argillic horizon: More than 60 inches
Soil reaction: Extremely acid to strongly acid throughout, except where lime has been applied
Depth to bedrock: More than 80 inches
Depth to seasonal high water table: At the surface to a depth of 1.0 foot

A or Ap horizon:
Color—hue of 10YR or 2.5Y, value of 2 or 3, and chroma of 1 or 2
Texture—sandy loam

Btg horizon:
Color—hue of 10YR or 2.5Y, value of 4 to 7, and chroma of 1 or 2; or is neutral and has value of 4 to 7
Texture—clay loam, sandy clay, or clay
Redoximorphic features—masses of oxidized iron in shades of red, yellow, and brown

Dorovan Series

Major land resource area: Southern Coastal Plain
Geomorphic setting: Swamps on coastal plains
Parent material: Mucky organic material
Drainage class: Very poorly drained
Slowest saturated hydraulic conductivity: Moderately high
Depth class: Very deep
Slope: 0 to 2 percent
Commonly associated soils: Johnston

Taxonomic Classification

Dysic, thermic Typic Haplosaprists

Typical Pedon

Dorovan silty clay loam in an area of Dorovan silty clay loam, overwash, 0 to 2 percent slopes, frequently flooded; in Lee County, S.C., 4.25 miles north on Bethune Highway from the intersection of Hartsville Highway and Bethune Highway, 1.4 miles east on Stokes Bridge Road West, 1.15 miles north on Newsome Road, 0.12 mile east on farm lane, 30 feet south of lane; elevation 180 feet; Kellytown, S.C., 7.5-minute topographic quadrangle; lat. 34 degrees 18 minutes 29 seconds N. and long. 80 degrees 14 minutes 57 seconds W.

Ag—0 to 10 inches; grayish brown (2.5Y 5/2) silty clay loam; massive; very friable; slightly sticky, slightly plastic; few very fine, fine, and medium roots; very strongly acid; abrupt wavy boundary.

Oa1—10 to 19 inches; black (10YR 2/1) muck; massive; very friable; slightly sticky, slightly plastic; few very fine, fine, and medium roots; 3 percent unrubbed fiber,

less than 1 percent rubbed fiber; about 55 percent mineral content; very strongly acid; gradual wavy boundary.

Oa2—19 to 34 inches; black (10YR 2/1) muck; massive; very friable; slightly sticky, slightly plastic; few very fine, fine, and medium roots throughout the matrix; 15 percent unrubbed fiber, 5 percent rubbed fiber; about 60 percent mineral content; very strongly acid; gradual wavy boundary.

Oa3—34 to 55 inches; very dark gray (2.5Y 3/1) muck; massive; very friable; slightly sticky, slightly plastic; 15 percent unrubbed fiber, 5 percent rubbed fiber; 10 percent wood fragments; about 65 percent mineral content; very strongly acid; gradual wavy boundary.

Oa4—55 to 70 inches; very dark grayish brown (10YR 3/2) muck; massive; very friable; slightly sticky, slightly plastic; 15 percent unrubbed fiber, 5 percent rubbed fiber; 10 percent wood fragments; about 78 percent mineral content; very strongly acid; clear wavy boundary.

Cg—70 to 80 inches; light brownish gray (2.5Y 6/2) coarse sand; single grain; loose; nonsticky, nonplastic; very strongly acid.

Range in Characteristics

Thickness of overwash material: 1 to 19 inches
Thickness of surface layer: 51 to 80 inches
Soil reaction: Extremely acid to strongly acid throughout, except where lime has been applied
Depth to bedrock: More than 80 inches
Depth to seasonal high water table: At the surface

Ag horizon:
Color—hue of 10YR or 2.5Y, value of 4 or 5, and chroma of 1 or 2
Texture—silty clay loam

Oe horizon (where present):
Color—hue of 10YR, value of 2, and chroma of 1 or 2
Texture—muck
Other distinctive properties—40 to 70 percent unrubbed fiber

Oa horizon:
Color—hue of 10YR or 2.5Y, value of 2 or 3, and chroma of 1; or is neutral and has value of 2
Texture—muck
Other distinctive properties—less than 17 percent rubbed fiber

Cg horizon:
Color—hue of 10YR or 2.5Y, value of 4 to 6, and chroma of 1 or 2
Texture—sand or coarse sand

Dothan Series

Major land resource area: Southern Coastal Plain
Geomorphic setting: Marine terraces on upper coastal plains
Parent material: Loamy fluviomarine deposits
Drainage class: Well drained
Slowest saturated hydraulic conductivity: Moderately high
Depth class: Very deep
Slope: 0 to 6 percent
Commonly associated soils: Ailey, Barnwell, Cowarts, Fuquay, Norfolk, and Wagram

Taxonomic Classification

Fine-loamy, kaolinitic, thermic Plinthic Kandiudults (fig. 18)

Typical Pedon

Dothan loamy sand in an area of Dothan loamy sand, 0 to 2 percent slopes; in Lee County, S.C., 2.4 miles north on Johnson Pond Road from its intersection with Camden Highway, 0.35 mile east then 0.6 mile north on Berry Road, 150 feet southeast of Berry Road; elevation 320 feet; Lucknow, S.C., 7.5-minute topographic

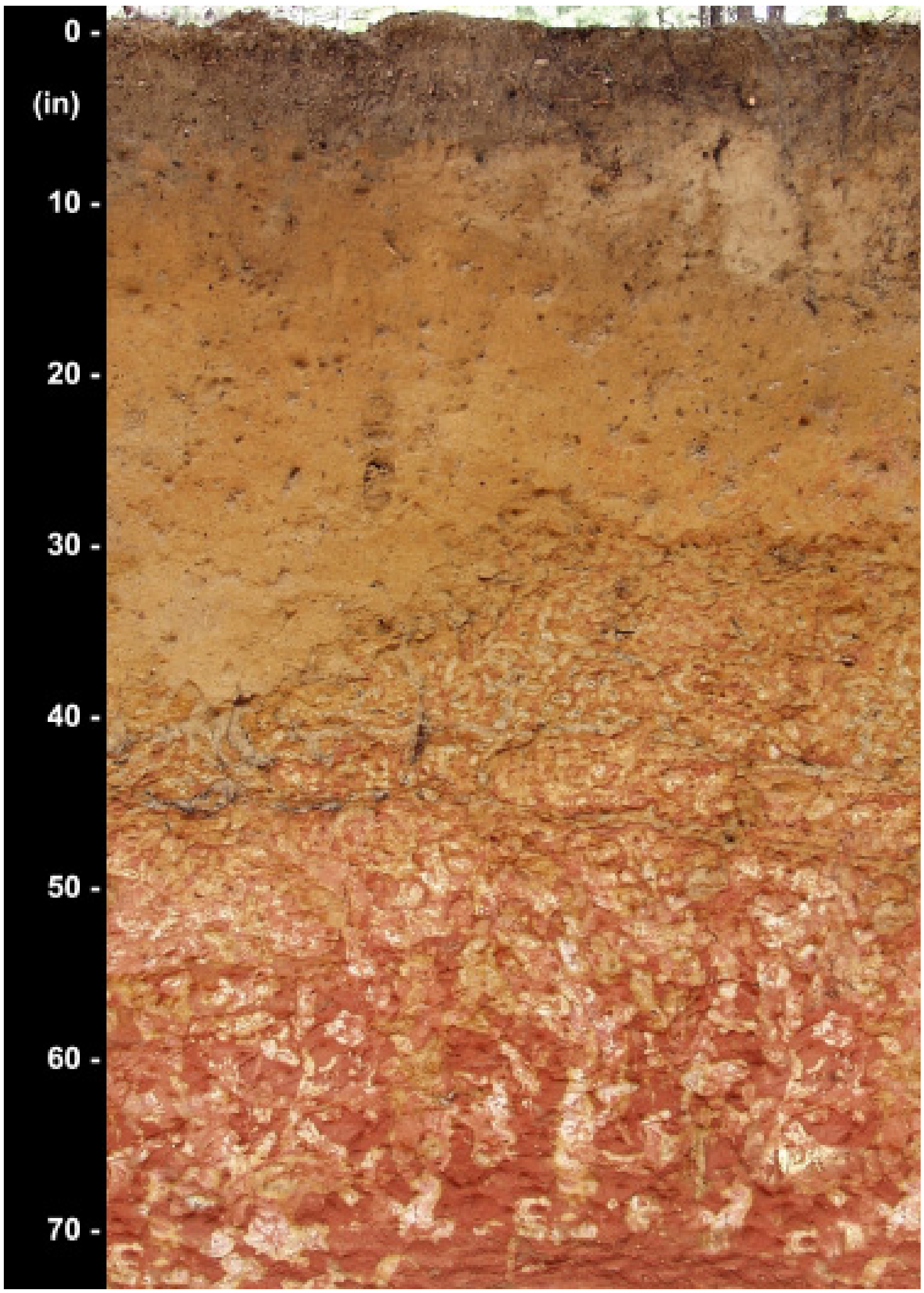

Figure 18.—Profile of a soil in the Dothan series.

quadrangle; lat. 34 degrees 15 minutes 42 seconds N. and long. 80 degrees 20 minutes 59 seconds W.

Ap—0 to 8 inches; brown (10YR 4/3) loamy sand; single grain; loose; nonsticky, nonplastic; few medium roots; moderately acid; abrupt irregular boundary.

E—8 to 12 inches; light yellowish brown (10YR 6/4) loamy sand; single grain; loose; nonsticky, nonplastic; few medium roots; moderately acid; clear wavy boundary.

Bt1—12 to 25 inches; yellowish brown (10YR 5/6) sandy clay loam; moderate medium subangular blocky structure; friable; slightly sticky, slightly plastic; few very fine pores; common distinct clay films on faces of peds; very strongly acid; gradual wavy boundary.

Bt2—25 to 37 inches; yellowish brown (10YR 5/6) sandy clay loam; moderate medium subangular blocky structure; friable; slightly sticky, slightly plastic; few very fine pores; common distinct clay films on faces of peds; few medium prominent yellowish red (5YR 5/8) masses of oxidized iron; very strongly acid; clear wavy boundary.

Btv1—37 to 55 inches; yellowish brown (10YR 5/6) sandy clay loam; moderate medium subangular blocky structure; firm; slightly sticky, slightly plastic; 8 percent coarse nodules of plinthite; common discontinuous clay films on faces of peds; common medium prominent light yellowish brown (2.5Y 6/4) and few medium prominent light gray (2.5YR 7/2) iron depletions; common coarse prominent red (2.5YR 5/8) masses of oxidized iron; very strongly acid; gradual wavy boundary.

Btv2—55 to 80 inches; yellowish brown (10YR 5/6) and brownish yellow (10YR 6/6) sandy clay loam; moderate medium subangular blocky structure; firm; slightly sticky, slightly plastic; 10 percent coarse nodules of plinthite; common discontinuous clay films on faces of peds; 5 percent rounded medium and coarse ironstone nodules; common medium prominent light gray (2.5YR 7/1) iron depletions; common coarse prominent red (2.5YR 5/8) masses of oxidized iron; very strongly acid.

Range in Characteristics

Thickness of sandy surface and subsurface layers: 6 to 19 inches
Depth to top of argillic horizon: 6 to 19 inches
Depth to base of argillic horizon: 60 to more than 80 inches
Depth to top of kandic horizon: 6 to 19 inches
Soil reaction: Very strongly acid to moderately acid throughout, except where lime has been applied
Plinthite content: 5 to 35 percent in the Btv horizon
Depth to bedrock: More than 80 inches
Depth to seasonal high water table: 3.3 to 5.0 feet

A or Ap horizon:
Color—hue of 10YR, value of 4 to 6, and chroma of 2 to 4
Texture—sand, loamy coarse sand, or loamy sand; eroded areas are sandy loam
Content and size of rock fragments—0 to 5 percent; mostly ironstone nodules

E horizon (where present):
Color—hue of 10YR, value of 6 or 7, and chroma of 3 or 4
Texture—sand, loamy coarse sand, or loamy sand
Content and size of rock fragments—0 to 5 percent; mostly ironstone nodules

Bt horizon:
Color—hue of 7.5YR or 10YR, value of 5 or 6, and chroma of 6 or 8
Texture—sandy loam, sandy clay loam, or clay loam
Content and size of rock fragments—0 to 5 percent; mostly ironstone nodules

Redoximorphic features—masses of oxidized iron in shades of red, yellow, and brown

Btv horizon:

Color—hue of 7.5YR or 10YR, value of 5 or 6, and chroma of 4 to 8
Texture—sandy clay loam, sandy clay, clay loam, or clay
Content and size of rock fragments—0 to 9 percent; mostly ironstone nodules
Redoximorphic features—iron depletions in shades of gray and masses of oxidized iron in shades of red, yellow, and brown

Eunola Series

Major land resource area: Southern Coastal Plain
Geomorphic setting: Stream terraces in river valleys
Parent material: Loamy alluvium
Drainage class: Moderately well drained
Slowest saturated hydraulic conductivity: Moderately high
Depth class: Very deep
Slope: 0 to 2 percent
Commonly associated soils: Alaga, Johns, Kalmia, Lumbee, Myatt, and State

Taxonomic Classification

Fine-loamy, siliceous, semiactive, thermic Aquic Hapludults

Typical Pedon

Eunola sandy loam in an area of Eunola sandy loam, 0 to 2 percent slopes, rarely flooded; in Lee County, S.C., 3.6 miles north on Bethune Highway from the intersection of Hartsville Highway in Bishopville, 0.45 mile east on Plantation Road, 0.65 mile east on unimproved road, 15 feet north of road; elevation 195 feet; Kellytown, S.C., 7.5-minute topographic quadrangle; lat. 34 degrees 17 minutes 08 seconds N. and long. 80 degrees 14 minutes 43 seconds W.

Ap—0 to 7 inches; dark gray (10YR 4/1) sandy loam; weak fine subangular blocky structure; friable; nonsticky, nonplastic; common fine and medium roots; strongly acid; abrupt wavy boundary.

E—7 to 10 inches; light yellowish brown (2.5Y 6/4) sandy loam; weak fine subangular blocky structure; very friable; nonsticky, nonplastic; strongly acid; clear wavy boundary.

Bt1—10 to 21 inches; light yellowish brown (2.5Y 6/4) sandy clay loam; weak medium subangular blocky structure; friable; slightly sticky, slightly plastic; few fine roots; few fine pores; common distinct clay films on faces of peds; common medium prominent brownish yellow (10YR 6/8) masses of oxidized iron; very strongly acid; gradual wavy boundary.

Bt2—21 to 38 inches; yellowish brown (10YR 6/6) sandy clay loam; weak medium subangular blocky structure; friable; slightly sticky, slightly plastic; common distinct clay films on faces of peds; common medium prominent light gray (10YR 7/1) iron depletions; common medium distinct yellowish brown (10YR 5/8) masses of oxidized iron; very strongly acid; gradual wavy boundary.

Btg—38 to 55 inches; light gray (10YR 7/1) sandy clay loam; weak medium subangular blocky structure; friable; slightly sticky, slightly plastic; common distinct clay films on faces of peds; many medium distinct very pale brown (10YR 7/4) and common medium prominent strong brown (7.5YR 5/8) masses of oxidized iron; very strongly acid; clear wavy boundary.

Cg—55 to 80 inches; light gray (2.5Y 7/1) sandy loam; massive; very friable; nonsticky, nonplastic; many medium prominent very pale brown (10YR 7/4) masses of oxidized iron; very strongly acid.

Range in Characteristics

Thickness of sandy surface and subsurface layers: 4 to 19 inches
Depth to top of argillic horizon: 4 to 19 inches
Depth to base of argillic horizon: 40 to 57 inches
Depth to contrasting soil material (lithologic discontinuity): 40 to more than 80 inches
Soil reaction: Very strongly acid or strongly acid throughout, except where lime has been applied
Depth to bedrock: More than 80 inches
Depth to seasonal high water table: 1.5 to 2.5 feet

A or Ap horizon:
Color—hue of 10YR or 2.5Y, value of 3 or 4, and chroma of 1 to 3
Texture—loamy sand or sandy loam
Content and size of rock fragments—0 to 1 percent; mostly quartz pebbles

E horizon:
Color—hue of 10YR or 2.5Y, value of 6, and chroma of 3 or 4
Texture—loamy sand or sandy loam
Content and size of rock fragments—0 to 1 percent; mostly quartz pebbles

Bt horizon:
Color—hue of 7.5YR to 2.5Y, value of 4 to 7, and chroma of 4 to 8
Texture—sandy clay loam or clay loam
Content and size of rock fragments—0 to 1 percent; mostly quartz pebbles
Redoximorphic features—iron depletions in shades of gray and masses of oxidized iron in shades of red, yellow, and brown

Btg horizon:
Color—hue of 10YR or 2.5Y, value of 4 to 7, and chroma of 1 or 2
Texture—sandy clay loam or clay loam
Content and size of rock fragments—0 to 1 percent; mostly quartz pebbles
Redoximorphic features—iron depletions in shades of gray and masses of oxidized iron in shades of red, yellow, and brown

C or 2C horizon:
Color—hue of 10YR or 2.5Y, value of 5 to 7, and chroma of 3 to 8
Texture—sand, loamy sand, sandy loam, or stratified with these textures
Content and size of rock fragments—0 to 6 percent; mostly quartz pebbles
Redoximorphic features—iron or clay depletions in shades of gray and masses of oxidized iron in shades of red, yellow, and brown

Cg or 2Cg horizon:
Color—hue of 10YR or 2.5Y, value of 5 to 7, and chroma of 1 or 2; or is neutral and has value of 4 to 7
Texture—sand, loamy sand, sandy loam, or stratified with these textures
Content and size of rock fragments—0 to 6 percent; mostly quartz pebbles
Redoximorphic features—iron or clay depletions in shades of gray and masses of oxidized iron in shades of red, yellow, and brown

Faceville Series

Major land resource area: Southern Coastal Plain
Geomorphic setting: Marine terraces on upper coastal plains

Parent material: Clayey fluviomarine deposits
Drainage class: Well drained
Slowest saturated hydraulic conductivity: Moderately high
Depth class: Very deep
Slope: 0 to 6 percent
Commonly associated soils: Lucy, Nankin, and Troup

Taxonomic Classification

Fine, kaolinitic, thermic Typic Kandiudults

Typical Pedon

Faceville loamy sand in an area of Faceville loamy sand, 0 to 2 percent slopes; in Lee County, S.C., 0.1 mile northwest on Harrington Road from its intersection with Herbert Wilson Road in Springhill, 100 feet southwest into field; elevation 435 feet; Dalzell, S.C., 7.5-minute topographic quadrangle; lat. 34 degrees 05 minutes 54 seconds N. and long. 80 degrees 26 minutes 40 seconds W.

Ap—0 to 7 inches; dark brown (10YR 4/3) loamy sand; single grain; loose; nonsticky, nonplastic; few fine and medium roots throughout; moderately acid; abrupt wavy boundary.

E—7 to 13 inches; light yellowish brown (10YR 6/4) loamy sand; single grain; loose; nonsticky, nonplastic; moderately acid; abrupt wavy boundary.

Bt1—13 to 22 inches; yellowish red (5YR 5/8) sandy clay; weak medium subangular blocky structure; friable; slightly sticky, slightly plastic; common distinct clay films on faces of peds; very strongly acid; diffuse wavy boundary.

Bt2—22 to 42 inches; red (2.5YR 4/8) clay; few medium and coarse irregular brownish yellow (10YR 5/8) mottles; moderate medium subangular blocky structure; friable; slightly sticky, slightly plastic; common distinct clay films on faces of peds; very strongly acid; diffuse wavy boundary.

Bt3—42 to 53 inches; red (2.5YR 5/8) clay; common brownish yellow (10YR 6/8) mottles; moderate coarse subangular blocky structure; friable; slightly sticky, slightly plastic; few very fine pores; common distinct clay films on faces of peds; very strongly acid; gradual wavy boundary.

Bt4—53 to 61 inches; 75 percent strong red (2.5YR 4/8) clay; weak medium subangular blocky structure; friable; slightly sticky, slightly plastic; 1 percent nodules of plinthite; common distinct clay films on faces of peds; very strongly acid; gradual wavy boundary.

Bt5—61 to 80 inches; red (2.5YR 5/8) sandy clay; common medium prominent brownish yellow (10YR 6/8) and reddish brown (5YR 4/4) mottles; weak coarse subangular blocky structure; firm; slightly sticky, slightly plastic; common distinct clay films on faces of peds; extremely acid.

Range in Characteristics

Thickness of sandy surface and subsurface layers: 4 to 19 inches
Depth to top of argillic horizon: 4 to 19 inches
Depth to base of argillic horizon: 60 to more than 80 inches
Depth to top of kandic horizon: 4 to 19 inches
Soil reaction: Extremely acid to strongly acid throughout, except where lime has been applied
Depth to bedrock: More than 80 inches
Depth to seasonal high water table: More than 6.0 feet

A or Ap horizon:
Color—hue of 7.5YR or 10YR, value of 4 or 5, and chroma of 3 or 4
Texture—sand or loamy sand; sandy loam in eroded areas

Content and size of rock fragments—0 to 10 percent; mostly quartz pebbles and ironstone nodules

E horizon:
Color—hue of 10YR, value of 6, and chroma of 4 or 6
Texture—sand or loamy sand
Content and size of rock fragments—0 to 10 percent; mostly quartz pebbles and ironstone nodules

Bt horizon (upper part):
Color—hue of 2.5YR or 5YR, value of 4 or 5, and chroma of 8
Texture—sandy clay, clay loam, or clay
Content and size of rock fragments—0 to 10 percent; mostly quartz pebbles and ironstone nodules

Bt horizon (lower part):
Color—hue of 10R or 2.5YR, value of 3 to 6, and chroma of 6 or 8
Texture—sandy clay, clay loam, or clay
Content and size of rock fragments—0 to 10 percent; mostly quartz pebbles and ironstone nodules
Mottles—non-redoximorphic mottles in shades of yellow and brown

Foxworth Series

Major land resource area: Southern Coastal Plain
Geomorphic setting: Sandsheets on coastal plains
Parent material: Eolian sands
Drainage class: Somewhat excessively drained
Slowest saturated hydraulic conductivity: High
Depth class: Very deep
Slope: 0 to 4 percent
Commonly associated soils: Alpin, Lucknow, and Bonneau

Taxonomic Classification

Thermic, coated Typic Quartzipsamments

Typical Pedon

Foxworth sand in an area of Foxworth sand, 0 to 4 percent slopes; in Lee County, S.C., 2.9 miles southeast on Manville-St. Charles Rd. from its intersection with Sumter Highway in Manville, 5.55 miles south on Raccoon Road, 0.65 mile southwest on Swimming Pen Road, 300 feet south of Swimming Pen Road; elevation 150 feet; Oswego, S.C., 7.5-minute topographic quadrangle; lat. 34 degrees 02 minutes 19 seconds N. and long. 80 degrees 16 minutes 14 seconds W.

Ap—0 to 4 inches; yellowish brown (10YR 5/3) sand; single grain; loose; nonsticky, nonplastic; very strongly acid; abrupt smooth boundary.
C1—4 to 37 inches; brownish yellow (10YR 6/8) sand; single grain; loose; nonsticky, nonplastic; very strongly acid; gradual wavy boundary.
C2—37 to 48 inches; brownish yellow (10YR 6/6) sand; single grain; loose; nonsticky, nonplastic; very strongly acid; gradual wavy boundary.
C3—48 to 64 inches; yellow (2.5Y 7/6) sand; single grain; loose; nonsticky, nonplastic; very strongly acid; gradual wavy boundary.
Cg—64 to 80 inches; white (2.5Y 8/1) sand; single grain; loose; nonsticky, nonplastic; common medium prominent yellow (2.5Y 7/6) masses of oxidized iron; very strongly acid.

Range in Characteristics

Thickness of sandy surface and underlying materials: More than 80 inches
Soil reaction: Very strongly acid to moderately acid throughout, except where lime has been applied
Depth to bedrock: More than 80 inches
Depth to seasonal high water table: 3.3 to 6.0 feet
Other distinctive properties: 10 percent or less silt plus clay content in the 10- to 40-inch control section

A or Ap horizon:
Color—hue of 10YR, value of 3 to 5, and chroma of 4 to 8
Texture—coarse sand or sand

C horizon:
Color—hue of 7.5YR to 2.5Y, value of 5 or 6, and chroma of 3 to 8
Texture—coarse sand or sand
Redoximorphic features (where present)—iron or clay depletions in shades of gray and masses of oxidized iron in shades of red, yellow, and brown

Cg horizon (where present):
Color—hue of 10YR or 2.5Y, value of 5 to 8, and chroma of 1 or 2
Texture—coarse sand or sand
Redoximorphic features—iron or clay depletions in shades of gray and masses of oxidized iron in shades of red, yellow, and brown

Fuquay Series

Major land resource area: Southern Coastal Plain
Geomorphic setting: Marine terraces on upper coastal plains
Parent material: Loamy fluviomarine deposits
Drainage class: Well drained
Slowest saturated hydraulic conductivity: Moderately low
Depth class: Very deep
Slope: 0 to 6 percent
Commonly associated soils: Ailey, Barnwell, Lucknow, Cowarts, Dothan, and Wagram

Taxonomic Classification

Loamy, kaolinitic, thermic Arenic Plinthic Kandiudults

Typical Pedon

Fuquay sand in an area of Fuquay sand, 0 to 6 percent slopes; in Lee County, S.C., 1.7 miles west on West Church Street from its intersection with North Main Street in Bishopville, 6.0 miles west on Camden Road, 0.8 mile south on Calvary Church Road, 1.0 mile southwest on Moses Road, 0.25 mile west on county road SF-31-503, 30 feet north of road; elevation 320 feet; Spring Hill, S.C., 7.5-minute topographic quadrangle; lat. 34 degrees 12 minutes 22 seconds N. and long. 80 degrees 23 minutes 04 seconds W.

Ap—0 to 8 inches; brown (10YR 4/3) sand; single grain; loose; nonsticky, nonplastic; few very fine, fine, medium, and coarse roots throughout; few very fine and fine pores; extremely acid; abrupt wavy boundary.
E—8 to 27 inches; pale yellow (2.5Y 7/4) sand; single grain; loose; nonsticky, nonplastic; few very fine and fine roots; extremely acid; gradual wavy boundary.

Bt—27 to 42 inches; yellowish brown (10YR 5/8) sandy clay loam; weak medium subangular blocky structure; friable; slightly sticky, slightly plastic; few distinct clay films on faces of peds; few medium prominent reddish brown (2.5YR 4/4) masses of oxidized iron; extremely acid; clear smooth boundary.

Btv1—42 to 61 inches; brownish yellow (10YR 6/6) sandy clay loam; moderate medium subangular blocky structure; firm; slightly sticky, slightly plastic; 8 percent rounded medium and coarse yellowish red (5YR 4/6) nodules of plinthite; common distinct clay films on faces of peds; 3 percent rounded medium and coarse red (2.5YR 5/6) masses of ironstone; few medium prominent light gray (2.5Y 7/2) iron depletions; many medium prominent red (2.5YR 4/6) masses of oxidized iron; extremely acid; gradual wavy boundary.

Btv2—61 to 80 inches; yellowish brown (10YR 5/8) sandy clay loam; moderate medium subangular blocky structure; firm; slightly sticky, slightly plastic; 10 percent rounded coarse red (2.5YR 4/6) nodules of plinthite; few distinct clay films on faces of peds; common coarse prominent light gray (2.5Y 7/2) iron depletions; many medium prominent red (2.5YR 4/6) masses of oxidized iron; extremely acid.

Range in Characteristics

Thickness of sandy surface and subsurface layers: 20 to 40 inches
Depth to top of argillic horizon: 20 to 40 inches
Depth to base of argillic horizon: 60 to more than 80 inches
Depth to top of kandic horizon: 20 to 40 inches
Soil reaction: Extremely acid to moderately acid throughout, except where lime has been applied
Plinthite content: More than 5 percent in the Btv horizon
Depth to bedrock: More than 80 inches
Depth to seasonal high water table: 3.5 to 6.0 feet

A or Ap horizon:
Color—hue of 10YR or 2.5Y, value of 4 or 5, and chroma of 2 or 3
Texture—coarse sand, sand, or loamy sand
Content and size of rock fragments—0 to 9 percent; mostly quartz pebbles and ironstone nodules

E horizon:
Color—hue of 10YR or 2.5Y, value of 5 to 7, and chroma of 4 or 6
Texture—coarse sand, sand, or loamy sand
Content and size of rock fragments—0 to 9 percent; mostly quartz pebbles and ironstone nodules

Bt horizon:
Color—hue of 7.5YR or 10YR, value of 5, and chroma of 6 or 8
Texture—sandy clay loam
Content and size of rock fragments—0 to 7 percent; mostly quartz pebbles and ironstone nodules
Redoximorphic features—masses of oxidized iron in shades of red, yellow, and brown

Btv horizon:
Color—hue of 7.5YR to 2.5Y, value of 5 or 6, and chroma of 4 to 8
Texture—sandy clay loam or clay loam
Content and size of rock fragments—0 to 7 percent; mostly quartz pebbles and ironstone nodules
Redoximorphic features—iron depletions in shades of gray and masses of oxidized iron in shades of red, yellow, and brown

Goldsboro Series

Major land resource area: Southern Coastal Plain
Geomorphic setting: Marine terraces on middle coastal plains
Parent material: Loamy fluviomarine deposits
Drainage class: Moderately well drained
Slowest saturated hydraulic conductivity: Moderately high
Depth class: Very deep
Slope: 0 to 2 percent
Commonly associated soils: Coxville, Lynchburg, Noboco, Norfolk, and Rains

Taxonomic Classification

Fine-loamy, siliceous, subactive, thermic Aquic Paleudults

Typical Pedon

Goldsboro sandy loam in an area of Goldsboro sandy loam, 0 to 2 percent slopes; in Lee County, S.C., 3.5 miles east on East Church Street from its intersection with South Main Street in Bishopville, 2.6 miles southeast on Wisacky Highway, 0.4 mile west on Coopers Mill Road, 400 feet south of road; elevation 185 feet; Bishopville East, S.C., 7.5-minute topographic quadrangle; lat. 34 degrees 08 minutes 49 seconds N. and long. 80 degrees 12 minutes 03 seconds W.

Ap—0 to 8 inches; brown (10YR 5/3) sandy loam; weak fine subangular blocky structure; friable; nonsticky, nonplastic; few very fine roots; few clean sand grains; slightly acid; clear wavy boundary.

Bt1—8 to 24 inches; brownish yellow (10YR 6/6) sandy clay loam; weak medium subangular blocky structure; friable; slightly sticky, slightly plastic; common fine pores; few distinct clay films on faces of peds; few clean sand grains; very strongly acid; gradual wavy boundary.

Bt2—24 to 35 inches; brownish yellow (10YR 6/6) sandy clay loam; weak medium subangular blocky structure; friable; slightly sticky, slightly plastic; common fine pores; common distinct clay films on faces of peds; common medium prominent gray (10YR 6/1) iron depletions; common medium prominent red (2.5YR 4/8) masses of oxidized iron; very strongly acid; gradual wavy boundary.

Btg1—35 to 47 inches; gray (10YR 6/1) sandy clay loam; weak medium subangular blocky structure; friable; slightly sticky, slightly plastic; common fine pores; common distinct clay films on faces of peds; few clean sand grains; common medium prominent red (2.5YR 4/8) and many medium prominent brownish yellow (10YR 6/8) masses of oxidized iron; very strongly acid; gradual wavy boundary.

Btg2—47 to 80 inches; gray (10YR 6/1) sandy clay loam; weak medium subangular blocky structure; friable; slightly sticky, slightly plastic; common distinct clay films on faces of peds; few medium prominent brownish yellow (10YR 6/8) masses of oxidized iron; very strongly acid; gradual wavy boundary.

Range in Characteristics

Thickness of sandy surface and subsurface layers: 5 to 19 inches
Depth to top of argillic horizon: 5 to 19 inches
Depth to base of argillic horizon: 60 to more than 80 inches
Soil reaction: Extremely acid to strongly acid throughout, except where lime has been applied
Depth to bedrock: More than 80 inches
Depth to seasonal high water table: 1.5 to 2.5 feet

Ap horizon or A horizon (where present):
Color—hue of 10YR or 2.5Y, value of 3 to 5, and chroma of 1 to 4

Texture—sandy loam
Content and size of rock fragments—0 to 4 percent; mostly quartz pebbles

E horizon (where present):
Color—hue of 10YR or 2.5Y, value of 6 or 7, and chroma of 3 or 4
Texture—sandy loam
Content and size of rock fragments—0 to 4 percent; mostly quartz pebbles

Bt horizon (upper):
Color—hue of 10YR or 2.5Y, value of 4 to 6, and chroma of 4 to 8
Texture—sandy loam or sandy clay loam
Content and size of rock fragments—0 to 4 percent; mostly quartz pebbles

Bt horizon (lower):
Color—hue of 10YR or 2.5Y, value of 3 to 6, and chroma of 4 to 8
Texture—sandy loam or sandy clay loam
Content and size of rock fragments—0 to 4 percent; mostly quartz pebbles
Redoximorphic features—iron or clay depletions in shades of gray and masses of oxidized iron in shades of red, yellow, and brown

Btg horizon:
Color—hue of 10YR or 2.5Y, value of 6 or 7, and chroma of 1 or 2
Texture—sandy clay loam or clay loam
Content and size of rock fragments—0 to 4 percent; mostly quartz pebbles
Redoximorphic features—iron or clay depletions in shades of gray and masses of oxidized iron in shades of red, yellow, and brown

Johns Series

Major land resource area: Southern Coastal Plain
Geomorphic setting: Stream terraces in river valleys
Parent material: Loamy alluvium over sandy alluvium
Drainage class: Moderately well drained
Slowest saturated hydraulic conductivity: Moderately high
Depth class: Very deep
Slope: 0 to 2 percent
Commonly associated soils: Alaga, Eunola, Kalmia, and Lumbee

Taxonomic Classification

Fine-loamy over sandy or sandy skeletal, siliceous, semiactive, thermic Aquic Hapludults

Typical Pedon

Johns loamy sand in an area of Johns loamy sand, 0 to 2 percent slopes, rarely flooded; in Lee County, S.C., 5.3 miles east on East Church Street from its intersection with South Main Street in Bishopville, 2.3 miles southeast on Wisacky Highway, 1.55 miles northeast on Fields Bridge Road, 100 feet south of road; elevation 155 feet; Bishopville East, S.C., 7.5-minute topographic quadrangle; lat. 34 degrees 10 minutes 03 seconds N. and long. 80 degrees 10 minutes 44 seconds W.

Ap—0 to 7 inches; light olive brown (2.5Y 5/4) loamy sand; weak fine subangular blocky structure; very friable; nonsticky, nonplastic; common fine and medium roots; slightly acid; clear smooth boundary.
E—7 to 15 inches; light yellowish brown (2.5Y 6/4) loamy sand; single grain; loose; nonsticky, nonplastic; slightly acid; clear wavy boundary.

Bt1—15 to 24 inches; olive yellow (2.5Y 6/6) sandy loam; weak medium subangular blocky structure; friable; few fine roots; few fine pores; common distinct clay films on faces of peds; moderately acid; clear wavy boundary.

Bt2—24 to 31 inches; pale brown (10YR 6/3) sandy clay loam; moderate medium subangular blocky structure; friable; slightly sticky, slightly plastic; common distinct clay films on faces of peds; common medium faint light brownish gray (10YR 6/2) iron depletions; common medium prominent yellowish brown (10YR 5/8) masses of oxidized iron; very strongly acid; clear wavy boundary.

BCt—31 to 36 inches; pale brown (10YR 6/3) sandy loam; weak medium subangular blocky structure; friable; nonsticky, nonplastic; common distinct clay bridges between sand grains; common medium prominent brownish yellow (10YR 6/8) masses of oxidized iron; very strongly acid; abrupt wavy boundary.

2C—36 to 44 inches; light yellowish brown (2.5Y 6/4) sand; single grain; loose; nonsticky, nonplastic; very strongly acid; gradual wavy boundary.

2Cg1—44 to 52 inches; light brownish gray (2.5Y 6/2) sand; single grain; loose; nonsticky, nonplastic; very strongly acid; gradual wavy boundary.

2Cg2—52 to 80 inches; light gray (10YR 7/1) coarse sand; single grain; loose; nonsticky, nonplastic; moderately acid.

Range in Characteristics

Thickness of sandy surface and subsurface layers: 5 to 19 inches
Depth to top of argillic horizon: 5 to 19 inches
Depth to base of argillic horizon: 17 to 40 inches
Depth to contrasting soil material (lithologic discontinuity): 17 to 40 inches
Soil reaction: Very strongly acid to moderately acid, except where lime has been applied
Depth to bedrock: More than 80 inches
Depth to seasonal high water table: 1.0 to 2.5 feet

Ap horizon or A horizon (where present):
Color—hue of 10YR or 2.5Y, value of 3 to 5, and chroma of 2 to 4
Texture—loamy sand or sandy loam
Content and size of rock fragments—0 to 5 percent; mostly quartz pebbles

E horizon (where present):
Color—hue of 10YR or 2.5Y, value of 6 or 7, and chroma of 3 or 4
Texture—loamy sand or sandy loam
Content and size of rock fragments—0 to 5 percent; mostly quartz pebbles

Bt horizon:
Color—hue of 10YR or 2.5Y, value of 5 to 7, and chroma of 3 to 6
Texture—sandy loam or sandy clay loam
Content and size of rock fragments—0 to 5 percent; mostly quartz pebbles
Redoximorphic features—iron depletions in shades of gray and masses of oxidized iron in shades of red, yellow, and brown

BCt horizon:
Color—hue of 10YR or 2.5Y, value of 3 to 6, and chroma of 3 to 6
Texture—sandy loam
Content and size of rock fragments—0 to 5 percent; mostly quartz pebbles
Redoximorphic features—iron depletions in shades of gray and masses of oxidized iron in shades of red, yellow, and brown

2C horizon:
Color—hue of 10YR or 2.5Y, value of 4 to 8, and chroma of 3 or 4
Texture—coarse sand, sand, loamy coarse sand, or loamy sand
Content and size of rock fragments—0 to 14 percent; mostly quartz pebbles

Redoximorphic features—iron or clay depletions in shades of gray and masses of oxidized iron in shades of red, yellow, and brown

2Cg horizon:
Color—hue of 10YR or 2.5Y, value of 4 to 8, and chroma of 1 or 2; or is neutral and has value of 4 to 8
Texture—coarse sand, sand, loamy coarse sand, or loamy sand
Content and size of rock fragments—0 to 14 percent; mostly quartz pebbles
Redoximorphic features—iron or clay depletions in shades of gray and masses of oxidized iron in shades of red, yellow, and brown

Johnston Series

Major land resource area: Southern Coastal Plain and Carolina and Georgia Sand Hills
Geomorphic setting: Swamps on coastal plains
Parent material: Loamy alluvium
Drainage class: Very poorly drained
Slowest saturated hydraulic conductivity: Moderately high
Depth class: Very deep
Slope: 0 to 2 percent
Commonly associated soils: Ailey, Lucknow, Dorovan, and Mouzon

Taxonomic Classification

Coarse-loamy, siliceous, active, acid, thermic Cumulic Humaquepts

Typical Pedon

Johnston muck in an area of Johnston muck, 0 to 2 percent slopes, frequently flooded; in Lee County, S.C., 0.5 mile northeast on Darlington Highway from its intersection with St. Charles Road in St. Charles, 0.55 mile south on Nancy Branch Road, 0.25 mile east, 100 feet northeast into woods; elevation 140 feet; Elliott, S.C., 7.5-minute topographic quadrangle; lat. 34 degrees 04 minutes 04 seconds N. and long. 80 degrees 12 minutes 04 seconds W.

Oa—0 to 5 inches; very dark brown (10YR 2/2) muck; moderate medium granular structure; very friable; nonsticky, nonplastic; many fine and medium and few coarse roots; 3 percent unrubbed fiber, less than 1 percent rubbed fiber; about 75 percent mineral content; extremely acid; clear wavy boundary.
A—5 to 31 inches; black (10YR 2/1) fine sandy loam; massive; friable; nonsticky, nonplastic; many fine and medium and few coarse roots; few decayed roots; very strongly acid; clear wavy boundary.
Cg1—31 to 63 inches; dark grayish brown (10YR 4/2) fine sand; single grain; loose; nonsticky, nonplastic; strongly acid; gradual wavy boundary.
Cg2—63 to 80 inches; light gray (10YR 7/2) sand; single grain; loose; nonsticky, nonplastic; moderately acid.

Range in Characteristics

Thickness of organic surface layer: Less than 8 inches
Thickness of mineral surface layer: 24 to 48 inches
Soil reaction: Extremely acid to moderately acid throughout
Depth to bedrock: More than 80 inches
Depth to seasonal high water table: At the surface

Oa horizon (where present):
Color—hue of 10YR or 2.5Y, value of 1 or 2, and chroma of 0 to 2

Texture—muck
Other distinctive properties—less than 17 percent rubbed fiber

A horizon:
Color—hue of 10YR or 2.5Y, value of 2 or 3, and chroma of 1 or 2; or is neutral and has value of 2 or 3
Texture (fine-earth fraction)—loamy coarse sand, coarse sandy loam, sandy loam, fine sandy loam, or loam

Cg horizon:
Color—hue of 10YR or 2.5Y, value of 4 to 7, and chroma of 1 or 2; or is neutral and has value of 2 or 3
Texture—sand or fine sand; thin subhorizons of sandy clay loam in some pedons

Kalmia Series

Major land resource area: Southern Coastal Plain
Geomorphic setting: Stream terraces in river valleys
Parent material: Loamy alluvium over sandy alluvium
Drainage class: Well drained
Slowest saturated hydraulic conductivity: Moderately high
Depth class: Very deep
Slope: 0 to 2 percent
Commonly associated soils: Alaga, Eunola, Johns, and Lumbee

Taxonomic Classification

Fine-loamy over sandy or sandy skeletal, siliceous, semiactive, thermic Typic Hapludults

Typical Pedon

Kalmia loamy sand in an area of Kalmia loamy sand, wet substratum, 0 to 2 percent slopes, rarely flooded; in Lee County, S.C., 5.3 miles east on East Church Street from its intersection with South Main Street in Bishopville, 2.3 miles southeast on Wisacky Highway, 1.7 miles northeast on Fields Bridge Road, 0.15 mile northeast on field road, 110 feet west into field; elevation 155 feet; Bishopville East, S.C., 7.5-minute topographic quadrangle; lat. 34 degrees 10 minutes 12 seconds N. and long. 80 degrees 10 minutes 43 seconds W.

Ap—0 to 6 inches; brown (10YR 4/3) loamy sand; weak fine subangular blocky structure; very friable; nonsticky, nonplastic; common fine and medium roots; moderately acid; clear smooth boundary.
Bt1—6 to 23 inches; yellowish brown (10YR 5/8) sandy clay loam; weak medium subangular blocky structure; friable; slightly sticky, slightly plastic; few fine roots; few fine pores; common distinct clay films on faces of peds; strongly acid; clear wavy boundary.
Bt2—23 to 27 inches; brownish yellow (10YR 6/8) sandy loam; weak medium subangular blocky structure; friable; common distinct clay bridges between sand grains; very strongly acid; clear wavy boundary.
2C1—27 to 42 inches; yellow (10YR 7/8) loamy fine sand; single grain; loose; nonsticky, nonplastic; very strongly acid; abrupt wavy boundary.
2C2—42 to 57 inches; yellow (10YR 7/6) sand; single grain; loose; nonsticky, nonplastic; few medium distinct very pale brown (10YR 7/3) iron depletions; very strongly acid; gradual wavy boundary.

2C3—57 to 80 inches; very pale brown (10YR 8/3) coarse sand; single grain; loose; nonsticky, nonplastic; common medium distinct yellow (10YR 7/6) masses of oxidized iron; very strongly acid.

Range in Characteristics

Thickness of sandy surface and subsurface layers: 6 to 19 inches
Depth to top of argillic horizon: 5 to 19 inches
Depth to base of argillic horizon: 18 to 40 inches
Depth to contrasting soil material (lithologic discontinuity): 20 to 40 inches
Soil reaction: Very strongly acid to moderately acid, except where lime has been applied
Depth to bedrock: More than 80 inches
Depth to seasonal high water table: 3.3 to 6.0 feet

A or Ap horizon:
Color—hue of 10YR, value of 4 or 5, and chroma of 3 or 4
Texture—sand or loamy sand
Content and size of rock fragments—0 to 5 percent; mostly quartz pebbles

E horizon (where present):
Color—hue of 10YR, value of 6 or 7, and chroma of 3 to 8
Texture—sand or loamy sand
Content and size of rock fragments—0 to 14 percent; mostly quartz pebbles

Bt horizon:
Color—hue of 7.5YR or 10YR, value of 5 or 6, and chroma of 4 to 8
Content and size of rock fragments—0 to 5 percent; mostly quartz pebbles
Texture—sandy loam or sandy clay loam

BC horizon (where present):
Color—hue of 7.5YR or 10YR, value of 5 or 6, and chroma of 4 to 8
Texture—sandy loam
Content and size of rock fragments—0 to 5 percent; mostly quartz pebbles
Redoximorphic features—iron depletions in shades of gray and masses of oxidized iron in shades of red, yellow, and brown

C horizon (where present):
Color—hue of 10YR, value of 4 to 8, and chroma of 3 or 4
Texture—loamy sand, loamy fine sand, sandy loam, or fine sandy loam
Content and size of rock fragments—0 to 14 percent; mostly quartz pebbles
Redoximorphic features—iron or clay depletions in shades of gray and masses of oxidized iron in shades of red, yellow, and brown

Cg horizon (where present):
Color—hue of 10YR, value of 4 to 8, and chroma of 1 or 2; or is neutral and has value of 4 to 8
Texture—loamy sand, loamy fine sand, sandy loam, or fine sandy loam
Content and size of rock fragments—0 to 14 percent; mostly quartz pebbles
Redoximorphic features—iron or clay depletions in shades of gray and masses of oxidized iron in shades of red, yellow, and brown

2C horizon:
Color—hue of 10YR, value of 4 to 8, and chroma of 3 to 8
Texture—coarse sand, sand, loamy coarse sand, loamy sand, or loamy fine sand
Content and size of rock fragments—0 to 14 percent; mostly quartz pebbles
Redoximorphic features—iron or clay depletions in shades of gray and masses of oxidized iron in shades of red, yellow, and brown

2Cg horizon (where present):

Color—hue of 10YR, value of 4 to 8, and chroma of 1 or 2; or is neutral and has value of 4 to 8
Texture—coarse sand, sand, loamy coarse sand, loamy sand, or loamy fine sand
Content and size of rock fragments—0 to 14 percent; mostly quartz pebbles
Redoximorphic features—iron or clay depletions in shades of gray and masses of oxidized iron in shades of red, yellow, and brown

Lakeland Series

Major land resource area: Southern Coastal Plain
Geomorphic setting: Dunes on coastal plains
Parent material: Eolian sands
Drainage class: Excessively drained
Slowest saturated hydraulic conductivity: High
Depth class: Very deep
Slope: 0 to 15 percent
Commonly associated soils: Alaga, Alpin, Lucknow, and Foxworth

Taxonomic Classification

Thermic, coated, Typic Quartzipsamments

Typical Pedon

Lakeland sand in an area of Lakeland sand, 0 to 6 percent slopes; in Lee County, S.C., 3.1 miles north on Ashland-Stokes Bridge Road from its intersection with U.S. Route 15, 0.2 mile west on Stokes Bridge Road, 0.6 mile northwest on Lynches River Road, 100 feet southwest of road; elevation 240 feet; Kellytown, S.C., 7.5-minute topographic quadrangle; lat. 34 degrees 17 minutes 56 seconds N. and long. 80 degrees 12 minutes 59 seconds W.

Ap—0 to 5 inches; dark grayish brown (10YR 4/2) sand; single grain; loose; nonsticky, nonplastic; many fine and medium and few coarse roots; very strongly acid; clear wavy boundary.
C1—5 to 30 inches; yellow (10YR 7/8) sand; single grain; loose; nonsticky, nonplastic; common fine and medium roots; very strongly acid; clear wavy boundary.
C2—30 to 80 inches; yellow (10YR 7/6) sand; single grain; loose; nonsticky, nonplastic; few medium roots; very strongly acid; gradual wavy boundary.

Range in Characteristics

Thickness of sandy surface and underlying materials: More than 80 inches
Soil reaction: Very strongly acid to moderately acid throughout, except where lime has been applied
Depth to bedrock: More than 80 inches
Depth to seasonal high water table: More than 6.0 feet
Other distinctive properties: 5 to 10 percent silt plus clay content in the 10- to 40-inch control section

A or Ap horizon:

Color—hue of 10YR, value of 3 or 4, and chroma of 2 or 3
Texture—sand

C horizon:

Color—hue of 10YR, value of 5 to 7, and chroma of 4 to 8
Texture—sand

Lucknow Series

Major land resource area: Carolina and Georgia Sand Hills and Southern Coastal Plain
Geomorphic setting: Marine terraces on middle and upper coastal plains and stream terraces in river valleys
Parent material: Loamy fluviomarine deposits and loamy alluvium
Drainage class: Somewhat excessively drained
Slowest saturated hydraulic conductivity: Moderately high
Depth class: Very deep
Slope: 0 to 6 percent
Commonly associated soils: Uplands—Ailey, Alpin, Candor, Cowarts, Dothan, Fuquay, Lakeland, and Troup; fluvial stream terraces—Alaga

Taxonomic Classification

Loamy, kaolinitic, thermic Grossarenic Kandiudults

Typical Pedon

Lucknow coarse sand in an area of Lucknow coarse sand, 0 to 4 percent slopes; in Lee County, S.C., 1.7 miles west on West Church Street from its intersection with South Main Street in Bishopville, 1.25 miles north on Pinchum Sly Road, 3.2 miles west on Lucknow Road, 5.1 miles west on Old Camden Road, 1.0 mile northeast on Radcliff Road, 0.2 mile southeast on lane, 0.15 mile west along power line right-of-way, 0.2 mile south on field lane, 100 feet west of lane; elevation 300 feet; Cassatt, S.C., 7.5-minute topographic quadrangle; lat. 34 degrees 17 minutes 48 seconds N. and long. 80 degrees 23 minutes 30 seconds W.

Ap—0 to 8 inches; brown (10YR 4/3) coarse sand; weak medium subangular blocky structure; very friable; nonsticky, nonplastic; common fine and medium and few very fine roots throughout; very strongly acid; abrupt smooth boundary.
E1—8 to 32 inches; light yellowish brown (10YR 6/4) sand; single grain; loose; nonsticky, nonplastic; very strongly acid; clear wavy boundary.
E2—32 to 42 inches; very pale brown (10YR 7/3) coarse sand; single grain; loose; nonsticky, nonplastic; common medium and coarse prominent reddish yellow (7.5YR 6/8) masses of oxidized iron; very strongly acid; gradual wavy boundary.
Bt1—42 to 48 inches; yellowish brown (10YR 5/6) loamy coarse sand; weak fine subangular blocky structure; friable; nonsticky, nonplastic; few distinct clay bridges between sand grains; common medium and coarse distinct reddish yellow (7.5YR 6/8) masses of oxidized iron; very strongly acid; gradual wavy boundary.
Bt2—48 to 66 inches; brownish yellow (10YR 6/8) sandy clay loam; moderate medium subangular blocky structure; friable; slightly sticky, slightly plastic; few faint clay films on faces of peds; common medium prominent light yellowish brown (2.5Y 6/4) and many medium prominent light gray (2.5Y 7/1) iron depletions; extremely acid; clear wavy boundary.
Bt3—66 to 80 inches; brownish yellow (10YR 6/6) sandy clay loam; weak coarse subangular blocky structure; friable; slightly sticky, slightly plastic; few faint clay films on faces of peds; light gray (2.5Y 7/1) iron depletions throughout; many medium prominent yellowish red (5YR 5/8) masses of oxidized iron; very strongly acid.

Range in Characteristics

Thickness of sandy surface and subsurface layers: 40 to 75 inches
Depth to top of argillic horizon: 40 to 75 inches
Depth to base of argillic horizon: 60 to 80 inches
Depth to top of kandic horizon: 40 to 74 inches

Soil reaction: Extremely acid to strongly acid throughout, except where lime has been applied.
Plinthite content: 0 to 4 percent in the Bt horizon
Depth to bedrock: More than 80 inches
Depth to seasonal high water table: 4.0 to 6.0 feet

A or Ap horizon:
Color—hue of 10YR or 2.5Y, value of 3 to 5, and chroma of 2 to 4
Texture—sand or coarse sand
Content and size of rock fragments—0 to 6 percent; mostly quartz pebbles

E horizon:
Color—hue of 10YR or 2.5Y, value of 5 to 7, and chroma of 2 to 6
Texture—sand or coarse sand
Content and size of rock fragments—0 to 6 percent; mostly quartz pebbles

Bt horizon:
Color—hue of 7.5YR or 10YR, value of 5 or 6, and chroma of 6 or 8
Texture—loamy coarse sand, sandy loam, or sandy clay loam
Content and size of rock fragments—0 to 3 percent; mostly quartz pebbles
Redoximorphic features—iron or clay depletions in shades of gray and masses of oxidized iron in shades of red, yellow, and brown

Btg horizon (where present):
Color—hue of 10YR or 2.5Y, value of 5 to 8, and chroma of 1 or 2
Texture—sandy loam or sandy clay loam
Content and size of rock fragments—0 to 3 percent; mostly quartz pebbles
Redoximorphic features—masses of oxidized iron in shades of red, yellow, and brown

Lucy Series

Major land resource area: Southern Coastal Plain
Geomorphic setting: Marine terraces on upper coastal plains
Parent material: Loamy fluviomarine deposits
Drainage class: Well drained
Slowest saturated hydraulic conductivity: Moderately high
Depth class: Very deep
Slope: 0 to 15 percent
Commonly associated soils: Faceville, Nankin, Orangeburg, and Troup

Taxonomic Classification

Loamy, siliceous, thermic Arenic Kandiudults

Typical Pedon

Lucy sand in an area of Lucy sand, 0 to 6 percent slopes; in Lee County, S.C., 9.5 miles north on Bethune Highway from its intersection with North Main Street in Bishopville, 0.3 mile east, 0.45 mile south, 0.1 mile east on an unimproved road, 75 feet east of road; elevation 240 feet; Lucknow, S.C., 7.5-minute topographic quadrangle; lat. 34 degrees 21 minutes 01 seconds N. and long. 80 degrees 17 minutes 33 seconds W.

Ap—0 to 7 inches; dark grayish brown (10YR 4/2) sand; weak medium granular structure; very friable; nonsticky, nonplastic; few very fine and fine roots; few very fine pores; strongly acid; abrupt smooth boundary.

E—7 to 22 inches; light yellowish brown (10YR 6/4) sand; single grain; loose; nonsticky, nonplastic; few very fine and fine roots; few very fine pores; strongly acid; abrupt smooth boundary.

Bt1—22 to 31 inches; strong brown (7.5YR 5/8) sandy clay loam; moderate medium subangular blocky structure; friable; slightly sticky, slightly plastic; few fine and medium roots; few very fine pores; common distinct clay films on faces of peds; strongly acid; clear wavy boundary.

Bt2—31 to 42 inches; yellowish red (5YR 5/8) sandy clay loam; moderate medium subangular blocky structure; friable; slightly sticky, slightly plastic; few very fine pores; common distinct clay films on faces of peds; very strongly acid; gradual wavy boundary.

Bt3—42 to 80 inches; red (2.5YR 4/8) sandy clay loam; moderate medium subangular blocky structure; friable; slightly sticky, slightly plastic; few very fine pores; common distinct clay films on faces of peds; very strongly acid.

Range in Characteristics

Thickness of sandy surface and subsurface layers: 20 to 40 inches
Depth to top of argillic horizon: 20 to 40 inches
Depth to base of argillic horizon: 60 to 80 inches
Depth to top of kandic horizon: 20 to 40 inches
Soil reaction: Very strongly acid or strongly acid throughout, except where lime has been applied
Depth to bedrock: More than 80 inches
Depth to seasonal high water table: More than 6.0 feet

A or Ap horizon:
Color—hue of 10YR, value of 4 or 5, and chroma of 2 to 4
Texture—sand
Content and size of rock fragments—0 to 14 percent; mostly quartz pebbles and ironstone nodules

E horizon:
Color—hue of 10YR, value of 6 or 7, and chroma of 3 or 4
Texture—sand
Content and size of rock fragments—0 to 14 percent; mostly quartz pebbles and ironstone nodules

Bt horizon:
Color—hue of 2.5YR or 5YR, value of 4 or 5, and chroma of 6 or 8; may have hue of 7.5YR if upper Bt is less than 10 inches thick
Texture—sandy loam or sandy clay loam
Content and size of rock fragments—0 to 14 percent; mostly quartz pebbles and ironstone nodules

Lumbee Series

Major land resource area: Southern Coastal Plain
Geomorphic setting: Stream terraces in river valleys
Parent material: Loamy alluvium over sandy alluvium
Drainage class: Poorly drained
Slowest saturated hydraulic conductivity: Moderately high
Depth class: Very deep
Slope: 0 to 2 percent
Commonly associated soils: Eunola, Johns, Johnston, Myatt, and Paxville

Taxonomic Classification

Fine-loamy over sandy or sandy-skeletal, siliceous, subactive, thermic Typic Endoaquults

Typical Pedon

Lumbee sandy loam in an area of Lumbee sandy loam, 0 to 2 percent slopes, rarely flooded; in Lee County, S.C., 4.0 miles southeast on Lynchburg Highway from its intersection with Darlington Highway, 0.5 mile northeast on farm lane, 150 feet northwest of lane; elevation 135 feet; Lynchburg, S.C., 7.5-minute topographic quadrangle; lat. 34 degrees 05 minutes 07 seconds N. and long. 80 degrees 05 minutes 29 seconds W.

Ap—0 to 8 inches; very dark gray (10YR 3/1) sandy loam; weak medium subangular blocky structure; very friable; nonsticky, nonplastic; common fine and very fine roots; few very fine and fine pores; moderately acid; abrupt smooth boundary.

Btg1—8 to 23 inches; grayish brown (10YR 5/2) sandy clay loam; moderate medium subangular blocky structure; friable; slightly sticky, slightly plastic; few fine roots; few fine tubular pores; common distinct clay films on faces of peds; common fine prominent brownish yellow (10YR 6/8) and yellow (10YR 7/6) masses of oxidized iron; strongly acid; clear wavy boundary.

Btg2—23 to 28 inches; light brownish gray (10YR 6/2) sandy clay loam; moderate medium subangular blocky structure; friable; slightly sticky, slightly plastic; few fine pores; common distinct clay films on faces of peds; strongly acid; clear wavy boundary.

2Cg1—28 to 45 inches; light brownish gray (10YR 6/2) sand; single grain; loose; nonsticky, nonplastic; strongly acid; gradual wavy boundary.

2Cg2—45 to 80 inches; light gray (10YR 7/1) coarse sand; single grain; loose; nonsticky, nonplastic; strongly acid.

Range in Characteristics

Thickness of sandy surface and subsurface layers: 6 to 19 inches
Depth to top of argillic horizon: 6 to 19 inches
Depth to base of argillic horizon: 14 to 40 inches
Depth to contrasting soil material (lithologic discontinuity): 14 to 40 inches
Soil reaction: Very strongly acid or strongly acid throughout, except where lime has been applied
Depth to bedrock: More than 80 inches
Depth to seasonal high water table: At the surface to a depth of 1.0 foot

A or Ap horizon:
Color—hue of 10YR, value of 2 or 3, and chroma of 1 or 2
Texture—sandy loam or loam
Content and size of rock fragments—0 to 5 percent; mostly quartz pebbles

Btg horizon:
Color—hue of 10YR, value of 5 to 7, and chroma of 1 or 2
Texture—sandy clay loam or clay loam
Content and size of rock fragments—0 to 5 percent; mostly quartz pebbles
Redoximorphic features—masses of oxidized iron in shades of red, yellow, and brown

2Cg horizon:
Color—hue of 10YR, value of 5 to 7, and chroma of 1 or 2
Texture—sand or coarse sand

Content and size of rock fragments—0 to 14 percent; mostly quartz pebbles
Redoximorphic features—iron depletions in shades of gray and masses of oxidized iron in shades of red, yellow, and brown

Lynchburg Series

Major land resource area: Southern Coastal Plain
Geomorphic setting: Marine terraces on middle coastal plains
Parent material: Loamy fluviomarine deposits
Drainage class: Somewhat poorly drained
Slowest saturated hydraulic conductivity: Moderately high
Depth class: Very deep
Slope: 0 to 2 percent
Commonly associated soils: Coxville, Goldsboro, Noboco, Norfolk, and Rains

Taxonomic Classification

Fine-loamy, siliceous, semiactive, thermic Aeric Paleaquults

Typical Pedon

Lynchburg sandy loam in an area of Lynchburg sandy loam, 0 to 2 percent slopes; in Lee County, S.C., 0.4 mile northeast on Darlington Highway from its intersection with Elliott Highway in Elliott, 0.1 mile southeast on farm lane, 100 feet northeast of lane; elevation 173 feet; Elliott, S.C., 7.5-minute topographic quadrangle; lat. 34 degrees 06 minutes 27 seconds N. and long. 80 degrees 09 minutes 28 seconds W.

Ap—0 to 7 inches; very dark gray (10YR 3/1) sandy loam; weak fine subangular blocky structure; very friable; nonsticky, nonplastic; common fine and medium and few coarse roots; few fine pores; strongly acid; gradual wavy boundary.
Bt—7 to 14 inches; olive brown (2.5Y 4/3) sandy clay loam; moderate medium subangular blocky structure; friable; slightly sticky, slightly plastic; few fine roots; few fine pores; common distinct clay films on faces of peds; few fine prominent olive yellow (2.5Y 6/8) masses of oxidized iron; strongly acid; gradual wavy boundary.
Btg1—14 to 24 inches; grayish brown (2.5Y 5/2) sandy clay loam; moderate medium subangular blocky structure; friable; slightly sticky, slightly plastic; few fine roots; common fine pores; common distinct clay films on faces of peds; common medium faint light brownish gray (2.5Y 6/2) iron depletions; common fine prominent brownish yellow (10YR 6/8) masses of oxidized iron; strongly acid; gradual wavy boundary.
Btg2—24 to 53 inches; gray (10YR 6/1) sandy clay loam; moderate medium subangular blocky structure; friable; slightly sticky, slightly plastic; few fine roots; common distinct clay films on faces of peds; many coarse prominent brownish yellow (10YR 6/8) masses of oxidized iron; strongly acid; gradual wavy boundary.
Btg3—53 to 80 inches; gray (10YR 5/1) sandy clay loam; weak medium subangular blocky structure; friable; slightly sticky, slightly plastic; common distinct clay films on faces of peds; few medium prominent brownish yellow (10YR 6/6 and 10YR 6/8) masses of oxidized iron; strongly acid.

Range in Characteristics

Thickness of surface and subsurface layers: 3 to 19 inches
Depth to top of argillic horizon: 3 to 19 inches
Depth to base of argillic horizon: 60 to more than 80 inches
Soil reaction: Extremely acid to strongly acid throughout, except where lime has been applied

Depth to bedrock: More than 80 inches
Depth to seasonal high water table: 0.5 to 1.5 feet

A or Ap horizon:
Color—hue of 10YR or 2.5Y, value of 3, and chroma of 1 or 2
Texture—sandy loam
Content and size of rock fragments—0 to 4 percent; mostly quartz pebbles

E horizon (where present):
Color—hue of 10YR or 2.5Y, value of 4 to 7, and chroma of 1 to 4
Texture—sandy loam
Content and size of rock fragments—0 to 4 percent; mostly quartz pebbles
Redoximorphic features—iron or clay depletions in shades of gray and masses of oxidized iron in shades of red, yellow, and brown

Bt horizon:
Color—hue of 2.5Y, value of 4 to 6, and chroma of 3 to 8
Texture—sandy loam or sandy clay loam
Content and size of rock fragments—0 to 4 percent; mostly quartz pebbles
Redoximorphic features—iron or clay depletions in shades of gray and masses of oxidized iron in shades of red, yellow, and brown

Btg horizon:
Color—hue of 10YR or 2.5Y, value of 4 to 7, and chroma of 1 or 2
Texture—sandy clay loam or clay loam
Content and size of rock fragments—0 to 4 percent; mostly quartz pebbles
Redoximorphic features—masses of oxidized iron in shades of red, yellow, and brown

Marvyn Series

Major land resource area: Carolina and Georgia Sand Hills and Southern Coastal Plain
Geomorphic setting: Marine terraces on upper coastal plains
Parent material: Loamy fluviomarine deposits
Drainage class: Well drained
Slowest saturated hydraulic conductivity: Moderately high
Depth class: Very deep
Slope: 0 to 6 percent
Commonly associated soils: Ailey, Alpin, Candor, Pelion, and Troup

Taxonomic Classification

Fine-loamy, kaolinitic, thermic Typic Kanhapludults

Typical Pedon

Marvyn sand in an area of Marvyn sand, 0 to 2 percent slopes; in Lee County, S.C., 0.9 mile north on Bethune Highway from its intersection with North Main Street in Bishopville, 4.3 miles northwest on Lucknow Road, 0.76 mile northeast on Zemp Road, 0.35 mile north on Country Breeze Lane, 200 feet east of Country Breeze Lane; elevation 270 feet; Lucknow, S.C., 7.5-minute topographic quadrangle; lat. 34 degrees 16 minutes 45 seconds N. and long. 80 degrees 18 minutes 34 seconds W.

Ap—0 to 6 inches; brown (10YR 5/3) sand; weak medium granular structure; very friable; nonsticky, nonplastic; few very fine and fine roots throughout; few very fine low continuity tubular pores; moderately acid; abrupt smooth boundary.

Bt1—6 to 25 inches; reddish yellow (7.5YR 6/6) sandy clay loam; moderate medium subangular blocky structure; friable; slightly sticky, slightly plastic; few fine and medium roots; few very fine pores; common distinct clay films on faces of peds; common very fine flakes of mica; strongly acid; clear wavy boundary.

Bt2—25 to 47 inches; reddish yellow (7.5YR 6/6) sandy loam; weak medium subangular blocky structure; friable; few fine and medium roots; few very fine pores; few distinct clay bridges between sand grains; common very fine flakes of mica; common fine white (10YR 8/1) masses of kaolin; 3-inch strata of reddish yellow (7.5YR 6/6) silty clay loam; strongly acid; clear wavy boundary.

C—47 to 80 inches; very pale brown (10YR 8/4) loamy fine sand; single grain; loose; nonsticky, nonplastic; common very fine flakes of mica; common fine white (10YR 8/1) masses of kaolin; common fine distinct brownish yellow (10YR 6/6) masses of oxidized iron; strongly acid.

Range in Characteristics

Thickness of sandy surface and subsurface layers: 5 to 19 inches
Depth to top of argillic horizon: 5 to 19 inches
Depth to base of argillic horizon: 34 to more than 80 inches
Depth to top of kandic horizon: 5 to 19 inches
Soil reaction: Very strongly acid or strongly acid throughout, except where lime has been applied
Mica content: 1 to 20 percent
Depth to bedrock: More than 80 inches
Depth to seasonal high water table: More than 6.0 feet

A or Ap horizon:
Color—hue of 10YR or 2.5Y, value of 4 or 5, and chroma of 2 to 4
Texture—sand or loamy sand
Content and size of rock fragments—0 to 12 percent; mostly quartz pebbles and ironstone nodules

E horizon (where present):
Color—hue of 10YR, value of 5 to 7, and chroma of 4 or 6
Texture—sand or loamy sand
Content and size of rock fragments—0 to 12 percent; mostly quartz pebbles and ironstone nodules

Bt horizon:
Color—hue of 7.5YR or 10YR, value of 4 to 7, and chroma of 4 to 8
Texture—sandy loam, sandy clay loam, and clay loam
Content and size of rock fragments—0 to 12 percent; mostly quartz pebbles and ironstone nodules
Other distinctive properties—1 to 20 percent, 1 to 20 mm, white noncemented masses of kaolin

BC horizon (where present):
Color—hue of 7.5YR or 10YR, value of 5 or 6, and chroma of 4 to 8
Texture—sandy loam or sandy clay loam
Content and size of rock fragments—0 to 12 percent; mostly quartz pebbles and ironstone nodules
Other distinctive properties—1 to 20 percent, 1 to 20 mm, white noncemented masses of kaolin

C horizon:
Color—hue of 7.5YR or 10YR, value of 5 to 8, and chroma of 4 to 8
Texture—sand, loamy sand, loamy fine sand, sandy loam, sandy clay loam, or stratified with these textures

Content and size of rock fragments—0 to 12 percent; mostly quartz pebbles and ironstone nodules
Mottles (where present)—shades of red, yellow, and brown
Other distinctive properties—1 to 20 percent, 1 to 20 mm, white noncemented masses of kaolin

Meggett Series

Major land resource area: Southern Coastal Plain
Geomorphic setting: Stream terraces in river valleys
Parent material: Clayey alluvium
Drainage class: Poorly drained
Slowest saturated hydraulic conductivity: Moderately low
Depth class: Very deep
Slope: 0 to 2 percent
Commonly associated soils: Chastain, Johns, Kalmia, Okeetee, and State

Taxonomic Classification

Fine, mixed, active, thermic Typic Albaqualfs

Typical Pedon

Meggett sandy loam in an area of Meggett sandy loam, 0 to 2 percent slopes, occasionally flooded; in Lee County, S.C., 4.35 miles southeast on Lynchburg Highway from its intersection with Darlington Highway, 0.86 mile northeast on unimproved road, 50 feet northwest of lane; elevation 130 feet; Lynchburg, S.C., 7.5-minute topographic quadrangle; lat. 34 degrees 04 minutes 57 seconds N. and long. 80 degrees 04 minutes 43 seconds W.

Ap—0 to 5 inches; very dark gray (10YR 3/1) sandy loam; weak medium granular structure; very friable; nonsticky, nonplastic; strongly acid; clear smooth boundary.
Btg1—5 to 25 inches; gray (10YR 6/1) clay; moderate medium subangular blocky structure; firm; slightly sticky, moderately plastic; common distinct clay films on faces of peds; common medium prominent brownish yellow (10YR 7/8) masses of oxidized iron; strongly acid; clear wavy boundary.
Btg2—25 to 38 inches; gray (10YR 5/1) clay; moderate medium subangular blocky structure; firm; slightly sticky, moderately plastic; common distinct clay films on faces of peds; few fine prominent brownish yellow (10YR 7/8) masses of oxidized iron; strongly acid; clear wavy boundary.
Btg3—38 to 51 inches; gray (2.5Y 6/1) clay; moderate medium subangular blocky structure; firm; slightly sticky, moderately plastic; common distinct clay films on faces of peds; moderately acid; clear wavy boundary.
2Cg—51 to 80 inches; light brownish gray (10YR 6/2), light gray (10YR 7/1), and white (10YR 8/1) coarse sand; single grain; loose; nonsticky, nonplastic; moderately acid.

Range in Characteristics

Thickness of sandy surface and subsurface layers: 3 to 19 inches
Depth to top of argillic horizon: 3 to 19 inches
Depth to base of argillic horizon: 50 to more than 80 inches
Depth to contrasting soil material (lithologic discontinuity): 50 to more than 80 inches
Soil reaction: Very strongly acid to slightly acid in the A horizon, strongly acid to moderately alkaline in the upper part of the B horizon, and slightly acid to moderately alkaline in the lower part of the Btg, BCg, and Cg horizons
Depth to bedrock: More than 80 inches

Depth to seasonal high water table: At the surface to a depth of 1.0 foot

A or Ap horizon:
Color—hue of 10YR or 2.5Y, value of 2 to 5, and chroma of 1 or 2
Texture—loamy fine sand, sandy loam, or loam
Content and size of rock fragments—0 to 3 percent; mostly quartz pebbles

Eg horizon (where present):
Color—hue of 10YR or 2.5Y, value of 5 to 7, and chroma of 1 or 2
Texture—loamy fine sand or sandy loam
Content and size of rock fragments—0 to 3 percent; mostly quartz pebbles

Btg horizon:
Color—hue of 10YR or 2.5Y, value of 4 to 7, and chroma of 1 or 2
Texture—clay loam or clay
Content and size of rock fragments—0 to 3 percent; mostly quartz pebbles
Redoximorphic features—masses of oxidized iron in shades of red, yellow, and brown

BCg or BCtg horizon (where present):
Color—hue of 10YR or 2.5Y, value of 4 to 7, and chroma of 1 or 2
Texture—sandy loam, loam, or sandy clay loam
Content and size of rock fragments—0 to 3 percent; mostly quartz pebbles
Redoximorphic features—masses of oxidized iron in shades of red, yellow, and brown

Cg horizon (where present):
Color—hue of 10YR or 2.5Y, value of 4 to 7, and chroma of 1 or 2; or is neutral and has value of 6 to 8
Texture—sandy loam or fine sandy loam
Content and size of rock fragments—0 to 3 percent; mostly quartz pebbles
Redoximorphic features—masses of oxidized iron in shades of yellow and brown

2Cg horizon:
Color—hue of 10YR or 2.5Y, value of 4 to 7, and chroma of 1 or 2; or is neutral and has value of 6 to 8
Texture—coarse sand, sand, or loamy coarse sand
Content and size of rock fragments—0 to 3 percent; mostly quartz pebbles
Redoximorphic features—masses of oxidized iron in shades of yellow and brown

Mouzon Series

Major land resource area: Southern Coastal Plain
Geomorphic setting: Low stream terraces in swamps
Parent material: Loamy alluvium
Drainage class: Poorly drained
Slowest saturated hydraulic conductivity: Moderately low
Depth class: Very deep
Slope: 0 to 2 percent
Commonly associated soils: Johnston

Taxonomic Classification

Fine-loamy, siliceous, semiactive, thermic Typic Albaqualfs

Typical Pedon

Mouzon fine sandy loam in an area of Mouzon and Hobcaw soils, 0 to 2 percent slopes, frequently flooded; in Williamsburg County, S.C., 6.5 miles southwest of

Kingstree on U. S. Highway 52 in Dickie Swamp, 90 feet west of highway; elevation 50 feet; Workman, S.C., 7.5-minute topographic quadrangle; lat. 33 degrees 38 minutes 02 seconds N. and long. 79 degrees 55 minutes 05 seconds W.

A—0 to 8 inches; dark gray (10YR 4/1) fine sandy loam; weak fine subangular blocky structure; friable; nonsticky, nonplastic; common medium and large roots; few worm casts; few fine distinct brownish yellow (10YR 6/8) masses of oxidized iron; moderately acid; clear wavy boundary.

Eg—8 to 11 inches; light brownish gray (10YR 6/2) fine sandy loam; weak fine subangular blocky structure; very friable; nonsticky, nonplastic; common fine and medium roots; slightly acid; abrupt wavy boundary.

Btg1—11 to 19 inches; gray (10YR 6/1) sandy clay loam; moderate medium subangular blocky structure; very firm; slightly sticky, slightly plastic; few fine roots; few faint clay films on faces of peds; common medium prominent olive yellow (2.5Y 6/8) masses of oxidized iron; slightly acid; gradual wavy boundary.

Btg2—19 to 31 inches; gray (10YR 6/1) sandy clay loam; moderate coarse prismatic structure parting to moderate coarse subangular blocky structure; very firm; slightly sticky, slightly plastic; few fine roots; few faint clay films on faces of peds; common medium prominent brownish yellow (10YR 6/8) masses of oxidized iron; slightly acid; gradual wavy boundary.

BCtg—31 to 46 inches; gray (10YR 5/1) fine sandy loam; weak medium subangular blocky structure; very friable; few fine roots; few faint clay bridges between sand grains; few pockets of sand; neutral; clear smooth boundary.

Cg—46 to 80 inches; light brownish gray (10YR 6/2) loamy fine sand; massive; very friable; nonsticky, nonplastic; few fine pockets of coquina; neutral.

Range in Characteristics

Thickness of sandy surface and subsurface layers: 3 to 19 inches
Depth to top of argillic horizon: 3 to 19 inches
Depth to base of argillic horizon: 40 to 60 inches
Depth to contrasting soil material (lithologic discontinuity): 40 to more than 80 inches
Soil reaction: Very strongly acid to slightly acid in the A and E horizons, strongly acid to moderately alkaline in the upper part of the B horizon, and slightly acid to moderately alkaline in the lower part of the B horizon and in the C horizon
Depth to bedrock: More than 80 inches
Depth to seasonal high water table: At the surface to a depth of 1.0 foot

A or Ap horizon:
Color—hue of 10YR, value of 3 to 5, and chroma of 1 or 2
Texture—loamy sand, sandy loam, or fine sandy loam

Eg horizon (where present):
Color—hue of 10YR or 2.5Y, value of 3 to 5, and chroma of 1 or 2
Texture—loamy fine sand or sandy loam

Btg horizon:
Color—hue of 10YR or 2.5Y, value of 4 to 6, and chroma of 1 or 2
Texture—sandy clay loam or clay loam
Redoximorphic features—masses of oxidized iron in shades of red, yellow, and brown

BCtg horizon (where present):
Color—hue of 10YR or 2.5Y, value of 4 to 6, and chroma of 1 or 2
Texture—loamy sand, sandy loam, or fine sandy loam
Redoximorphic features—masses of oxidized iron in shades of red, yellow, and brown

Cg horizon:

Color—hue of 10YR, value of 5 to 8, and chroma of 1 or 2; or is neutral and has value of 6 to 8

Texture—loamy fine sand, sandy loam, or fine sandy loam

Content and size of rock fragments—0 to 6 percent; mostly quartz pebbles

Redoximorphic features—masses of oxidized iron in shades of yellow and brown

2Cg horizon (where present):

Color—hue of 10YR, value of 5 to 8, and chroma of 1 or 2; or is neutral and has value of 6 to 8

Texture—coarse sand, sand, or loamy sand

Content and size of rock fragments—0 to 6 percent; mostly quartz pebbles

Redoximorphic features—masses of oxidized iron in shades of yellow and brown

Myatt Series

Major land resource area: Southern Coastal Plain
Geomorphic setting: Stream terraces in river valleys
Parent material: Loamy alluvium
Drainage class: Poorly drained
Slowest saturated hydraulic conductivity: Moderately high
Depth class: Very deep
Slope: 0 to 2 percent
Commonly associated soils: Eunola, Johns, Johnston, Lakeland, and Paxville

Taxonomic Classification

Fine-loamy, siliceous, active, thermic Typic Endoaquults

Typical Pedon

Myatt sandy loam in an area of Myatt-Paxville complex, 0 to 2 percent slopes, occasionally flooded; in Lee County, S.C., 0.8 mile southwest on Loop Road from the entrance to Lee State Park, 50 feet south of road; elevation 160 feet; Bishopville East, S.C., 7.5-minute topographic quadrangle; lat. 34 degrees 11 minutes 51 seconds N. and long. 80 degrees 10 minutes 59 seconds W.

A—0 to 7 inches; very dark gray (10YR 3/1) sandy loam; moderate very coarse subangular blocky structure; very friable; nonsticky, nonplastic; few coarse and common fine and very fine roots; few very fine and fine pores; extremely acid; clear smooth boundary.

Eg—7 to 13 inches; dark gray (10YR 4/1) loam; moderate coarse subangular blocky structure; very friable; nonsticky, nonplastic; few fine and medium roots; few very fine and fine pores; few fine irregular reddish brown (5YR 4/4) masses of oxidized iron; extremely acid; clear wavy boundary.

Btg1—13 to 35 inches; gray (10YR 5/1) clay loam; moderate coarse subangular blocky structure; friable; slightly sticky, slightly plastic; few fine roots; few fine pores; common distinct clay films; few fine prominent brownish yellow (10YR 6/8) masses of oxidized iron on faces of peds and few fine prominent yellowish red (5YR 4/6) masses of oxidized iron along root channels; extremely acid; gradual wavy boundary.

Btg2—35 to 50 inches; light gray (2/5Y 6/1) clay loam; weak medium subangular blocky structure; friable; slightly sticky, slightly plastic; few fine pores; few distinct clay films on faces of peds; few fine prominent yellow (10YR 7/8) masses of oxidized iron; very strongly acid; clear wavy boundary.

2Cg—50 to 80 inches; light gray (2.5Y 6/1) loamy sand; single grain; loose; nonsticky, nonplastic; strongly acid.

Range in Characteristics

Thickness of sandy surface and subsurface layers: 4 to 19 inches
Depth to top of argillic horizon: 4 to 19 inches
Depth to base of argillic horizon: 40 to 80 inches
Depth to contrasting soil material (lithologic discontinuity): 40 to 60 inches
Soil reaction: Extremely acid to strongly acid throughout, except where lime has been applied
Depth to bedrock: More than 80 inches
Depth to seasonal high water table: At the surface to a depth of 1.0 foot

A or Ap horizon:
Color—hue of 10YR or 2.5Y, value of 2 to 5, and chroma of 1 or 2
Texture—loamy sand, sandy loam, or fine sandy loam
Content and size of rock fragments—0 to 3 percent; mostly quartz pebbles

Eg horizon (where present):
Color—hue of 10YR, value of 4 to 7, and chroma of 1 or 2
Texture—sandy loam
Content and size of rock fragments—0 to 3 percent; mostly quartz pebbles

Btg horizon:
Color—hue of 10YR or 2.5Y, value of 4 to 7, and chroma of 1 or 2
Texture—sandy clay loam or clay loam
Content and size of rock fragments—0 to 3 percent; mostly quartz pebbles
Redoximorphic features—masses of oxidized iron in shades of red, yellow, and brown

2Cg horizon:
Color—hue of 10YR or 2.5Y, value of 6 or 7, and chroma of 1 or 2; or is neutral and has value of 6 or 7
Texture—sand, loamy sand, or sandy loam
Content and size of rock fragments—0 to 3 percent; mostly quartz pebbles
Redoximorphic features—masses of oxidized iron in shades of yellow and brown

Nankin Series

Major land resource area: Southern Coastal Plain
Geomorphic setting: Marine terraces on upper coastal plains
Parent material: Clayey fluviomarine deposits
Drainage class: Well drained
Slowest saturated hydraulic conductivity: Moderately high
Depth class: Very deep
Slope: 2 to 15 percent
Commonly associated soils: Faceville, Lucy, Norfolk, and Orangeburg

Taxonomic Classification

Fine, kaolinitic, thermic Typic Kanhapludults

Typical Pedon

Nankin sandy clay loam in an area of Nankin sandy clay loam, 2 to 6 percent slopes, moderately eroded; in Lee County, S.C., 0.43 mile west on Old Camden Highway from its junction with Pinchum Sly Road, 0.25 mile south, 0.15 mile east, 0.10 mile north, 0.25 mile southeast, 0.10 mile east on farm road, 120 feet north of farm road; elevation 255 feet; Bishopville West, S.C., 7.5-minute topographic quadrangle; lat. 34 degrees 13 minutes 45 seconds N. and long. 80 degrees 16 minutes 43 seconds W.

Ap—0 to 6 inches; reddish brown (5YR 4/4) sandy clay loam; weak moderate subangular blocky structure; very friable; slightly sticky, slightly plastic; few fine and medium roots throughout; moderately acid; abrupt smooth boundary.

Bt1—6 to 19 inches; red (2.5YR 4/8) clay; moderate medium subangular blocky structure; firm; slightly sticky, slightly plastic; common prominent clay films on faces of peds; moderately acid; gradual wavy boundary.

Bt2—19 to 28 inches; yellowish red (2.5YR 5/8) clay; moderate medium subangular blocky structure; firm; slightly sticky, slightly plastic; common distinct clay films on faces of peds; strongly acid; gradual wavy boundary.

Bt3—28 to 37 inches; red (2.5YR 5/6) clay; moderate medium subangular blocky structure; firm; slightly sticky, slightly plastic; common prominent clay films on faces of peds; common medium prominent brownish yellow (10YR 5/8) and distinct dark red (10R 3/6) relic masses of oxidized iron; strongly acid; gradual wavy boundary.

Bt4—37 to 51 inches; red (2.5YR 5/8) clay; moderate medium subangular blocky structure; firm; slightly sticky, slightly plastic; common distinct clay films on faces of peds; prominent white (10YR 8/1) relic iron depletions; common medium prominent brownish yellow (10YR 6/8) and few fine distinct red (10R 4/6) relic masses of oxidized iron; strongly acid; gradual wavy boundary.

Bt5—51 to 62 inches; yellowish red (5YR 5/6) sandy clay; weak medium subangular blocky structure; firm; slightly sticky, slightly plastic; few distinct clay films on faces of peds; few fine prominent white (10YR 8/1) relic iron depletions; common medium prominent brownish yellow (10YR 6/8) and few distinct red (10R 4/6) relic masses of oxidized iron; very strongly acid; gradual wavy boundary.

Bt6—62 to 80 inches; yellowish red (5YR 5/8) sandy clay loam; weak medium subangular blocky structure; friable; slightly sticky, slightly plastic few distinct clay films on faces of peds; few fine prominent white (10YR 8/1) relic iron depletions; common medium prominent brownish yellow (10YR 6/6) and few fine distinct red (10R 4/6) relic masses of oxidized iron; very strongly acid.

Range in Characteristics

Thickness of sandy surface and subsurface layers: 2 to 19 inches
Depth to top of argillic horizon: 2 to 19 inches
Depth to base of argillic horizon: 40 to more than 60 inches
Depth to top of kandic horizon: 2 to 19 inches
Soil reaction: Very strongly acid or strongly acid throughout, except where lime has been applied
Depth to bedrock: More than 80 inches
Depth to seasonal high water table: More than 6.0 feet

A or Ap horizon:
Color—hue of 5YR to 10YR, value of 3 or 4, and chroma of 3 or 4
Texture—sand, loamy sand, sandy loam, or sandy clay loam
Content and size of rock fragments—0 to 10 percent; mostly ironstone nodules

Bt horizon (upper part):
Color—hue of 2.5YR or 5YR, value of 4 or 5, and chroma of 6 or 8
Texture—clay loam, sandy clay, or clay.
Content and size of rock fragments—0 to 10 percent; mostly ironstone nodules
Relic redoximorphic features—masses of oxidized iron in shades of red, yellow, and brown

Bt horizon (lower part):
Color—hue of 2.5YR to 10YR, value of 4 to 7, and chroma of 6 or 8
Texture—sandy clay loam or sandy clay

Content and size of rock fragments—0 to 10 percent; mostly ironstone nodules
Relic redoximorphic features—iron or clay depletions in shades of gray and masses of oxidized iron in shades of red, yellow, and brown

Noboco Series

Major land resource area: Southern Coastal Plain
Geomorphic setting: Marine terraces on middle coastal plains
Parent material: Loamy fluviomarine deposits
Drainage class: Well drained
Slowest saturated hydraulic conductivity: Moderately high
Depth class: Very deep
Slope: 0 to 6 percent
Commonly associated soils: Coxville, Goldsboro, Norfolk, and Rains

Taxonomic Classification

Fine-loamy, siliceous, subactive, thermic Oxyaquic Paleudults

Typical Pedon

Noboco loamy sand in an area of Noboco-Goldsboro complex, 0 to 2 percent slopes; in Lee County, S.C., 1.75 miles southwest of St. Charles on the Darlington Highway from its intersection with St. Charles Road, 100 feet south of the centerline of Darlington Highway; elevation 170 feet; Elliott, S.C., 7.5-minute topographic quadrangle; lat. 34 degrees 03 minutes 10 seconds N. and long. 80 degrees 14 minutes 39 seconds W.

Ap—0 to 10 inches; dark grayish brown (10YR 4/2) loamy sand; weak medium granular structure; very friable; nonsticky, nonplastic; common fine and medium roots; moderately acid; abrupt smooth boundary.
E—10 to 13 inches; pale brown (10YR 6/3) loamy sand; massive; very friable; nonsticky, nonplastic; few fine roots; moderately acid; clear wavy boundary.
Bt1—13 to 25 inches; yellowish brown (10YR 5/6) sandy clay loam; moderate medium subangular blocky structure; friable; slightly sticky, slightly plastic; common distinct clay films on faces of peds; very strongly acid; gradual smooth boundary.
Bt2—25 to 34 inches; yellowish brown (10YR 5/6) sandy clay loam; moderate medium subangular blocky structure; friable; slightly sticky, slightly plastic; common distinct clay films on faces of peds; common medium distinct strong brown (7.5YR 5/8) masses of oxidized iron; extremely acid; gradual smooth boundary.
Bt3—34 to 58 inches; yellowish brown (10YR 5/8) sandy clay loam; moderate medium subangular blocky structure; friable; slightly sticky, slightly plastic; common distinct clay films on faces of peds; common medium faint strong brown (7.5YR 5/8) masses of oxidized iron; extremely acid; gradual smooth boundary.
Bt4—58 to 80 inches; yellowish brown (10YR 5/8) sandy clay loam; moderate medium subangular blocky structure; friable; slightly sticky, slightly plastic; common distinct clay films on faces of peds; gray (10YR 6/1) iron depletions; common coarse prominent red (2.5YR 5/6) masses of oxidized iron; extremely acid.

Range in Characteristics

Thickness of sandy surface and subsurface layers: 5 to 19 inches
Depth to top of argillic horizon: 5 to 19 inches
Depth to base of argillic horizon: 60 to more than 80 inches
Soil reaction: Extremely acid to strongly acid throughout, except where lime has been applied

Plinthite content: 0 to 4 percent in the lower Bt horizon
Depth to bedrock: More than 80 inches
Depth to seasonal high water table: 2.5 to 3.3 feet

A or Ap horizon:
Color—hue of 10YR or 2.5Y, value of 3 to 5, and chroma of 1 to 4
Texture—loamy sand or sandy loam
Content and size of rock fragments—0 to 4 percent; mostly quartz pebbles

E horizon (where present):
Color—hue of 10YR or 2.5Y, value of 5 or 6, and chroma of 3 or 4
Texture—loamy sand
Content and size of rock fragments—0 to 4 percent; mostly quartz pebbles

Bt horizon:
Color—hue of 7.5YR to 2.5Y, value of 4 to 6, and chroma of 4 to 8
Texture—sandy clay loam, clay loam, or sandy clay
Content and size of rock fragments—0 to 4 percent; mostly quartz pebbles
Redoximorphic features—iron or clay depletions in shades of gray and masses of oxidized iron in shades of red, yellow, and brown

Btg horizon (where present):
Color—hue of 10YR or 2.5Y, value of 6 or 7, and chroma of 1 or 2
Texture—sandy clay loam or sandy clay
Content and size of rock fragments—0 to 4 percent; mostly quartz pebbles
Redoximorphic features—masses of oxidized iron in shades of red, yellow, and brown

Norfolk Series

Major land resource area: Southern Coastal Plain
Geomorphic setting: Marine terraces on middle and upper coastal plains
Parent material: Loamy fluviomarine deposits
Drainage class: Well drained
Slowest saturated hydraulic conductivity: Moderately high
Depth class: Very deep
Slope: 0 to 6 percent
Commonly associated soils: Coxville, Goldsboro, Noboco, Orangeburg, Rains, and Wagram

Taxonomic Classification

Fine-loamy, kaolinitic, thermic Typic Kandiudults

Typical Pedon

Norfolk loamy sand in an area of Norfolk loamy sand, 0 to 2 percent slopes; in Lee County, S.C., 3.5 miles east on East Church Street from its intersection with South Main Street in Bishopville, 2.6 miles southeast on Wisacky Highway, 1.0 mile west on Coopers Mill Road, 2.2 miles south on Dog Island Road, 50 feet east of road; elevation 176 feet; Elliott, S.C., 7.5-minute topographic quadrangle; lat. 34 degrees 16 minutes 54 seconds N. and long. 80 degrees 12 minutes 30 seconds W.

Ap—0 to 7 inches; grayish brown (10YR 5/2) loamy sand; weak fine granular structure; very friable; nonsticky, nonplastic; slightly acid; abrupt wavy boundary.
E—7 to 15 inches; light yellowish brown (10YR 6/4) loamy sand; massive; friable; nonsticky, nonplastic; few fine roots; few fine pores; strongly acid; gradual wavy boundary.

Bt1—15 to 42 inches; yellowish brown (10YR 5/6) sandy clay loam; moderate fine subangular blocky structure; friable; slightly sticky, slightly plastic; few fine roots; few fine pores; common distinct clay films on faces of peds; strongly acid; gradual wavy boundary.

Bt2—42 to 47 inches; brownish yellow (10YR 6/8) sandy clay loam; moderate medium subangular blocky structure; friable; slightly sticky, slightly plastic; many fine and medium roots; few fine and medium pores; common distinct clay films on faces of peds; common fine and medium distinct yellowish red (5YR 5/8) and common medium prominent red (2.5YR 4/8) masses of oxidized iron; strongly acid; gradual wavy boundary.

Bt3—47 to 63 inches; brownish yellow (10YR 6/8) sandy clay loam; moderate medium subangular blocky structure; friable; slightly sticky, slightly plastic; many fine and medium roots; many fine pores; 2 percent plinthite nodules; common distinct clay films on faces of peds; common medium prominent red (2.5YR 4/8) masses of oxidized iron; strongly acid; gradual wavy boundary.

Bt4—63 to 80 inches; brownish yellow (10YR 6/8) sandy clay loam; weak medium subangular blocky structure; friable; slightly sticky, slightly plastic; few fine pores; few distinct clay film on faces of peds; gray (10YR 6/1) iron depletions; many medium prominent red (2.5YR 4/8) masses of oxidized iron; very strongly acid.

Range in Characteristics

Thickness of sandy surface and subsurface layers: 3 to 19 inches
Depth to top of argillic horizon: 3 to 19 inches
Depth to base of argillic horizon: 60 to more than 80 inches
Depth to top of kandic horizon: 3 to 19 inches
Soil reaction: Very strongly acid or strongly acid throughout, except where lime has been applied
Plinthite content: 0 to 4 percent in the lower Bt horizon
Depth to bedrock: More than 80 inches
Depth to seasonal high water table: 4.0 to 6.0 feet

A or Ap horizon:
Color—hue of 10YR, value of 4 or 5, and chroma of 2 to 4
Texture—loamy sand
Content and size of rock fragments—0 to 4 percent; mostly quartz pebbles

E horizon (where present):
Color—hue of 10YR, value of 6 or 7, and chroma of 3 or 4
Texture—loamy sand
Content and size of rock fragments—0 to 4 percent; mostly quartz pebbles

Bt horizon (upper part):
Color—hue of 7.5YR or 10YR, value of 4 to 6, and chroma of 4 to 8
Texture—sandy loam or sandy clay loam
Content and size of rock fragments—0 to 4 percent; mostly quartz pebbles
Redoximorphic features (where present)—masses of oxidized iron in shades of red, yellow, and brown

Bt horizon (lower part):
Color—hue of 7.5YR or 10YR, value of 4 to 6, and chroma of 4 to 8
Texture—sandy clay loam or clay loam
Content and size of rock fragments—0 to 4 percent; mostly quartz pebbles
Redoximorphic features (where present)—iron depletions in shades of gray and masses of oxidized iron in shades of red, yellow, and brown

Okeetee Series

Major land resource area: Southern Coastal Plain
Geomorphic setting: Stream terraces in river valleys
Parent material: Clayey alluvium
Drainage class: Somewhat poorly drained
Slowest saturated hydraulic conductivity: Moderately low
Depth class: Very deep
Slope: 0 to 2 percent
Commonly associated soils: Johns, Kalmia, Meggett, and State

Taxonomic Classification

Fine, mixed, semiactive, thermic Aeric Albaqualfs

Typical Pedon

Okeetee fine sandy loam in an area of Okeetee fine sandy loam, 0 to 2 percent slopes, rarely flooded; in Lee County, S.C., 0.84 mile southeast on S.C. Highway 341 from its intersection with Florence Highway in Lynchburg, 1.35 miles northeast on Back Swamp Road, 360 feet northwest of Back Swamp Road; elevation 127 feet; Lynchburg, S.C., 7.5-minute topographic quadrangle; lat. 34 degrees 03 minutes 59 seconds N. and long. 80 degrees 02 minutes 40 seconds W.

Ap—0 to 3 inches; dark gray (10YR 4/1) fine sandy loam; weak medium granular structure; very friable; nonsticky, nonplastic; extremely acid; clear smooth boundary.

E—3 to 8 inches; gray (10YR 5/1) sandy loam; weak medium granular structure; very friable; nonsticky, nonplastic; very strongly acid; clear smooth boundary.

Bt—8 to 17 inches; olive yellow (2.5Y 6/8) clay; moderate medium subangular blocky structure; firm; slightly sticky, moderately plastic; many prominent clay films on faces of peds; common coarse prominent gray (10YR 6/1) iron depletions; common medium distinct brownish yellow (10YR 6/8) masses of oxidized iron; very strongly acid; clear wavy boundary.

Btg1—17 to 43 inches; gray (10YR 6/1) clay; moderate medium subangular blocky structure; firm; slightly sticky, moderately plastic; common prominent clay films on faces of peds; common medium prominent brownish yellow (10YR 6/8) and common coarse prominent red (2.5YR 4/8) masses of oxidized iron; very strongly acid; clear wavy boundary.

Btg2—43 to 57 inches; light gray (10YR 7/1) clay loam; moderate medium subangular blocky structure; firm; slightly sticky, moderately plastic; common distinct clay films on faces of peds; common coarse prominent brownish yellow (10YR 6/8) masses of oxidized iron; strongly acid; clear wavy boundary.

Btg3—57 to 63 inches; light gray (10YR 6/1) clay loam; moderate medium subangular blocky structure; firm; slightly sticky, moderately plastic; common distinct clay films on faces of peds; common medium prominent brownish yellow (10YR 6/8) masses of oxidized iron; strongly acid; clear wavy boundary.

Cg—63 to 80 inches; light gray (10YR 7/1) fine sandy loam; massive; friable; nonsticky, nonplastic; moderately acid.

Range in Characteristics

Thickness of sandy surface and subsurface layers: 3 to 11 inches
Depth to top of argillic horizon: 3 to 11 inches
Depth to base of argillic horizon: 40 to more than 80 inches
Depth to contrasting soil material (lithologic discontinuity): 40 to more than 80 inches

Soil reaction: Extremely acid to slightly acid in the A and E horizons and in the upper part of the B horizon, strongly acid to moderately alkaline in the lower part of the B horizon, and moderately acid to moderately alkaline in the C horizon
Depth to bedrock: More than 80 inches
Depth to seasonal high water table: 0.5 to 1.0 foot

A or Ap horizon:
Color—hue of 10YR or 2.5Y, value of 3 to 5, and chroma of 1 to 3
Texture—sandy loam or fine sandy loam
Content and size of rock fragments—0 to 1 percent; mostly quartz pebbles

Eg horizon (where present):
Color—hue of 10YR or 2.5Y, value of 5 to 7, and chroma of 1 to 4
Texture—sandy loam
Content and size of rock fragments—0 to 1 percent; mostly quartz pebbles

Bt horizon:
Color—hue of 2.5Y, value of 4 to 7, and chroma of 3 to 8
Texture—clay
Content and size of rock fragments—0 to 1 percent; mostly quartz pebbles
Redoximorphic features—iron or clay depletions in shades of gray and masses of oxidized iron in shades of red, yellow, and brown.

Btg horizon:
Color—hue of 10YR or 2.5Y, value of 6 or 7, and chroma of 1 or 2
Texture—clay loam or clay
Content and size of rock fragments—0 to 1 percent; mostly quartz pebbles
Redoximorphic features—masses of oxidized iron in shades of red, yellow, and brown

BCg horizon (where present):
Color—hue of 10YR or 2.5Y, value of 6 or 7, and chroma of 1 or 2
Texture—sandy clay loam or clay loam
Content and size of rock fragments—0 to 1 percent; mostly quartz pebbles
Redoximorphic features—masses of oxidized iron in shades of red, yellow, and brown

Cg horizon:
Color—hue of 10YR or 2.5Y, value of 6 or 7, and chroma of 1 or 2; or is neutral and has value of 6 or 7
Texture—sandy loam or fine sandy loam
Content and size of rock fragments—0 to 1 percent; mostly quartz pebbles
Redoximorphic features (where present)—masses of oxidized iron in shades of yellow and brown

Note: Okeetee soils in this survey area are taxadjuncts because they have an abrupt texture change from the surface horizons to the upper subsoil and have slow permeability (moderately low saturated hydraulic conductivity). This difference does not significantly affect the use, management, or interpretations of the soils. Okeetee soils are typically fine, mixed, semiactive, thermic Aeric Endoaqualfs.

Orangeburg Series

Major land resource area: Southern Coastal Plain
Geomorphic setting: Marine terraces on upper coastal plains
Parent material: Loamy fluviomarine deposits
Drainage class: Well drained

Slowest saturated hydraulic conductivity: Moderately high
Depth class: Very deep
Slope: 0 to 6 percent
Commonly associated soils: Dothan, Lucy, Norfolk, Rains, and Thursa

Taxonomic Classification

Fine-loamy, kaolinitic, thermic Typic Kandiudults (fig. 19)

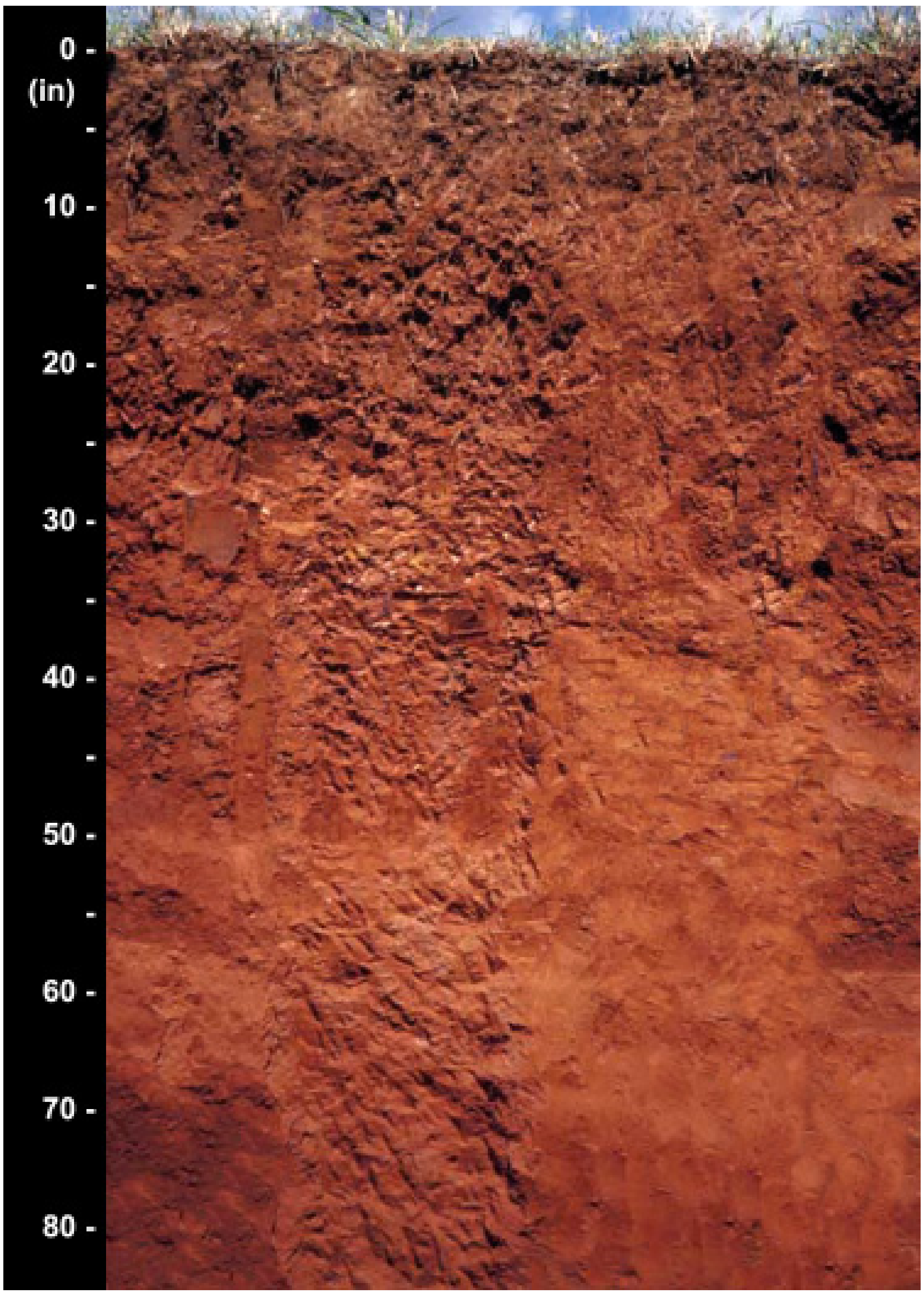

Figure 19.—Profile of a soil in the Orangeburg series.

Typical Pedon

Orangeburg loamy sand in an area of Orangeburg loamy sand, 0 to 2 percent slopes; in Lee County, S.C., 1.7 miles west on West Church Street from its intersection with South Main Street in Bishopville, 1.5 miles on Camden Highway, 0.5 mile south on Traub Road, 0.4 mile on Piedmont Road, 30 feet east of Piedmont Road; elevation 267 feet; Bishopville West, S.C., 7.5-minute topographic quadrangle; lat. 34 degrees 13 minutes 18 seconds N. and long. 80 degrees 17 minutes 09 seconds W.

Ap—0 to 10 inches; dark yellowish brown (10YR 4/4) loamy sand; massive; friable; nonsticky, nonplastic; few fine and medium roots throughout; slightly acid; abrupt smooth boundary.

Bt1—10 to 19 inches; strong brown (7.5YR 5/8) sandy clay loam; moderate medium subangular blocky structure; friable; slightly sticky, slightly plastic; common distinct clay films on faces of peds; strongly acid; gradual wavy boundary.

Bt2—19 to 27 inches; yellowish red (5YR 5/8) sandy clay loam; moderate coarse subangular blocky structure; friable; slightly sticky, slightly plastic; common distinct clay films on faces of peds; strongly acid; gradual wavy boundary.g

Bt3—27 to 40 inches; red (2.5YR 4/8) sandy clay loam; moderate coarse subangular blocky structure; friable; slightly sticky, slightly plastic; common distinct clay films on faces of peds; strongly acid; gradual wavy boundary.

Bt4—40 to 57 inches; red (10R 4/6) clay loam; moderate coarse subangular blocky structure; friable; slightly sticky, slightly plastic; common distinct clay films on faces of peds; 3 percent ironstone nodules; strongly acid; gradual wavy boundary.

Bt5—57 to 80 inches; dark red (10R 3/6) clay loam; few medium prominent brownish yellow (10YR 6/8) mottles; moderate coarse subangular blocky structure; friable; slightly sticky, slightly plastic; common distinct clay films on faces of peds; 3 percent ironstone nodules; strongly acid.

Range in Characteristics

Thickness of sandy surface and subsurface layers: 3 to 19 inches
Depth to top of argillic horizon: 3 to 19 inches
Depth to base of argillic horizon: 60 to more than 80 inches
Depth to top of kandic horizon: 3 to 19 inches
Soil reaction: Very strongly acid or strongly acid throughout, except where lime has been applied
Depth to bedrock: More than 80 inches
Depth to seasonal high water table: More than 6.0 feet

A or Ap horizon:
Color—hue of 10YR, value of 4 or 5, and chroma of 3 or 4
Texture—loamy sand or sandy loam
Content and size of rock fragments—0 to 4 percent; mostly quartz pebbles

E horizon (where present):
Color—hue of 10YR, value of 5 or 6, and chroma of 3 to 6
Texture—loamy sand
Content and size of rock fragments—0 to 4 percent; mostly quartz pebbles

Bt horizon (upper part):
Color—hue of 2.5YR or 5YR, value of 4 or 5, and chroma of 6 or 8; may have hue of 7.5YR when upper Bt is less than 10 inches thick
Texture—sandy loam or sandy clay loam
Content and size of rock fragments—0 to 4 percent; mostly quartz pebbles

Bt horizon (lower part):
Color—hue of 10R or 2.5YR, value of 3 or 4, and chroma of 6 or 8

Texture—sandy clay loam or clay loam
Content and size of rock fragments—0 to 4 percent; mostly quartz pebbles
Mottles (where present)—shades of yellow

Paxville Series

Major land resource area: Southern Coastal Plain
Geomorphic setting: Stream terraces in river valleys
Parent material: Loamy alluvium
Drainage class: Very poorly drained
Slowest saturated hydraulic conductivity: Moderately high
Depth class: Very deep
Slope: 0 to 2 percent
Commonly associated soils: Eunola, Johns, Lakeland, and Myatt

Taxonomic Classification

Fine-loamy, siliceous, semiactive, thermic Typic Umbraquults

Typical Pedon

Paxville coarse sandy loam in an area of Paxville coarse sandy loam, 0 to 2 percent slopes, occasionally flooded; in Lee County, S.C., 1.0 mile southwest on Loop Road from the entrance to Lee State Park, 2.3 miles north on Loop Road then 0.1 mile east, 200 feet north into woods; elevation 162 feet; Bishopville East, S.C., 7.5-minute topographic quadrangle; lat. 34 degrees 12 minutes 39 seconds N. and long. 80 degrees 11 minutes 42 seconds W.

A—0 to 13 inches; black (10YR 2/1) coarse sandy loam; weak coarse granular structure; very friable; nonsticky, nonplastic; few very fine, fine, medium, and coarse roots; few fine and very fine tubular pores of low continuity; extremely acid; clear smooth boundary.

Btg1—13 to 33 inches; dark gray (10YR 4/1) sandy clay loam; weak medium subangular blocky structure; very friable; slightly sticky, slightly plastic; few very fine and fine roots; common faint clay films on faces of peds; common fine prominent brownish yellow (10YR 6/8) masses of oxidized iron; extremely acid; clear wavy boundary.

Btg2—33 to 48 inches; dark gray (10YR 4/1) clay loam; weak medium subangular blocky structure; very friable; slightly sticky, slightly plastic; few very fine roots; few very fine pores; common prominent clay films on faces of peds; extremely acid; clear wavy boundary.

2Cg1—48 to 65 inches; dark gray (10YR 4/1) loamy coarse sand; single grain; loose; nonsticky, nonplastic; few very fine roots; extremely acid; clear wavy boundary.

2Cg2—65 to 80 inches; grayish brown (10YR 5/2) coarse sand; single grain; loose; nonsticky, nonplastic; very strongly acid.

Range in Characteristics

Thickness of surface layer: 10 to 23 inches
Depth to top of argillic horizon: 10 to 23 inches
Depth to base of argillic horizon: 40 to more than 80 inches
Depth to contrasting soil material (lithologic discontinuity): 40 to more than 80 inches
Soil reaction: Extremely acid to strongly acid throughout, except where lime has been applied
Depth to bedrock: More than 80 inches
Depth to seasonal high water table: At the surface to a depth of 1.0 foot

A or Ap horizon:
Color—hue of 10YR, value of 2 or 3, and chroma of 1 or 2
Texture—coarse sandy loam or sandy loam
Content and size of rock fragments—0 to 3 percent; mostly quartz pebbles

Btg horizon:
Color—hue of 10YR or 2.5Y, value of 4 to 7, and chroma of 1 or 2; or is neutral and has value of 4 to 7
Texture—sandy clay loam or clay loam; sandy clay in lower subhorizons
Content and size of rock fragments—0 to 3 percent; mostly quartz pebbles
Redoximorphic features—masses of oxidized iron in shades of red, yellow, and brown

Cg horizon (where present):
Color—hue of 10YR or 2.5Y, value of 5 to 7, and chroma of 1 or 2; or is neutral and has value of 5 to 7
Texture—coarse sandy loam, sandy loam, fine sandy loam, or loam
Content and size of rock fragments—0 to 3 percent; mostly quartz pebbles
Redoximorphic features (where present)—masses of oxidized iron in shades of yellow and brown

2Cg horizon:
Color—hue of 10YR or 2.5Y, value of 5 to 7, and chroma of 1 or 2; or is neutral and has value of 5 to 7
Texture—coarse sand, sand, loamy coarse sand, or loamy sand
Content and size of rock fragments—0 to 3 percent; mostly quartz pebbles
Redoximorphic features (where present)—masses of oxidized iron in shades of yellow and brown

Pelion Series

Major land resource area: Carolina and Georgia Sand Hills and Southern Coastal Plain
Geomorphic setting: Marine terraces on upper coastal plains
Parent material: Loamy fluviomarine deposits
Drainage class: Moderately well drained
Slowest saturated hydraulic conductivity: Moderately high
Depth class: Very deep
Slope: 0 to 6 percent
Commonly associated soils: Ailey, Barnwell, Cowarts, Dothan, and Johnston

Taxonomic Classification

Fine-loamy, kaolinitic, thermic Aquic Kanhapludults

Typical Pedon

Pelion loamy sand in an area of Pelion loamy sand, 0 to 2 percent slopes; in Lee County, S.C., 1.7 miles north on Old Georgetown Road from its intersection with Hubb Kelly Road in Lucknow, 0.2 mile east on lane, 50 feet north of lane; elevation 290 feet; Lucknow, S.C., 7.5-minute topographic quadrangle; lat. 34 degrees 18 minutes 38 seconds N. and long. 80 degrees 21 minutes 06 seconds W.

Ap—0 to 8 inches; dark grayish brown (2.5Y 4/2) loamy sand; weak medium granular structure; loose; nonsticky, nonplastic; few very fine and fine roots; very strongly acid; clear wavy boundary.
Bt1—8 to 17 inches; light yellowish brown (10YR 6/4) sandy clay loam; weak coarse subangular blocky structure; friable; slightly sticky, slightly plastic; few fine roots;

few very fine pores; few faint light clay films on faces of peds; common medium prominent strong brown (7.5YR 5/8) masses of oxidized iron; extremely acid; gradual wavy boundary.

Bt2—17 to 24 inches; light yellowish brown (2.5Y 6/4) sandy clay loam; weak coarse subangular blocky structure; friable; slightly sticky, slightly plastic; few fine pores; common distinct clay films on faces of peds; common medium distinct light brownish gray (2.5Y 6/2) iron depletions; common medium prominent reddish yellow (7.5YR 6/8) masses of oxidized iron; very strongly acid; gradual wavy boundary.

Btgx—24 to 47 inches; 60 percent light gray (2.5Y 7/1) clay loam; weak coarse subangular blocky structure; firm; 30 percent brittle; slightly sticky, slightly plastic; common distinct clay films on faces of peds; many coarse and very coarse distinct pale yellow (2.5Y 7/4) and common coarse and very coarse prominent olive yellow (2.5Y 6/8) masses of oxidized iron; extremely acid; gradual wavy boundary.

Btg—47 to 52 inches; 55 percent light gray (2.5Y 7/1) sandy clay loam; weak coarse subangular blocky structure; friable; slightly sticky, slightly plastic; few faint clay films on faces of peds; many coarse prominent yellow (10YR 7/6) and common coarse irregular brownish yellow (10YR 6/8) masses of oxidized iron; very strongly acid; gradual wavy boundary.

C—52 to 80 inches; yellow (10YR 7/8) sandy loam; massive; very friable; nonsticky, nonplastic; common very fine flakes of mica; many coarse prominent light gray (10YR 7/1) iron depletions; very strongly acid.

Range in Characteristics

Thickness of sandy surface and subsurface layers: 2 to 19 inches
Depth to top of argillic horizon: 2 to 19 inches
Depth to base of argillic horizon: 40 to more than 60 inches
Depth to top of kandic horizon: 2 to 19 inches
Depth to contrasting soil material (lithologic discontinuity): 40 to more than 60 inches
Depth to fragic soil properties: 10 to 40 inches
Soil reaction: Extremely acid to strongly acid throughout, except where lime has been applied
Mica content: 1 to 20 percent
Depth to bedrock: More than 80 inches
Depth to seasonal high water table: 1.0 to 2.5 feet

A or Ap horizon:
Color—hue of 10YR or 2.5Y, value of 3 to 5, and chroma of 2 or 3
Texture—sand, loamy sand, loamy fine sand, or fine sandy loam
Content and size of rock fragments—0 to 6 percent; mostly quartz pebbles and ironstone nodules

E horizon (where present):
Color—hue of 10YR or 2.5Y, value of 4 to 7, and chroma of 2 to 4
Texture—sand or loamy sand
Content and size of rock fragments—0 to 6 percent; mostly quartz pebbles and ironstone nodules

Bt horizon:
Color—hue of 7.5YR to 2.5Y, value of 5 to 7, and chroma of 4 or 6
Texture—sandy clay loam or clay loam
Content and size of rock fragments—0 to 6 percent; mostly quartz pebbles and ironstone nodules
Redoximorphic features—iron or clay depletions in shades of gray and masses of oxidized iron in shades of red, yellow, and brown
Other distinctive properties—10 to 40 percent, by volume, firm, brittle peds

Btg horizon (where present):

Color—hue of 10YR or 2.5Y, value of 6 or 7, and chroma of 1 or 2; or is neutral and has value of 6 or 7

Texture—sandy clay loam, clay loam, sandy clay, or clay

Content and size of rock fragments—0 to 6 percent; mostly quartz pebbles and ironstone nodules

Redoximorphic features—masses of oxidized iron in shades of red, yellow, and brown

C, 2C, Cg, or 2Cg horizon:

Color—hue of 7.5YR to 2.5Y, value of 4 to 7, and chroma of 1 to 8

Texture—loamy coarse sand, loamy fine sand, sandy loam, or silty clay loam

Content and size of rock fragments—0 to 6 percent; mostly quartz pebbles and ironstone nodules

Redoximorphic features—iron or clay depletions in shades of gray and masses of oxidized iron in shades of red, yellow, and brown

Rains Series

Major land resource area: Southern Coastal Plain
Geomorphic setting: Carolina Bays and open depressions on middle coastal plains
Parent material: Loamy fluviomarine deposits
Drainage class: Poorly drained
Slowest saturated hydraulic conductivity: Moderately high
Depth class: Very deep
Slope: 0 to 2 percent
Commonly associated soils: Coxville, Goldsboro, Lynchburg, Noboco, and Norfolk

Taxonomic Classification

Fine-loamy, siliceous, semiactive, thermic Typic Paleaquults (fig. 20)

Typical Pedon

Rains sandy loam in an area of Rains sandy loam, 0 to 2 percent slopes; in Lee County, S.C., 3.5 miles east on East Church Street from its intersection with South Main Street in Bishopville, 2.6 miles southeast on Wisacky Highway, 1.0 mile west on Coopers Mill Road, 3.1 miles south on Dog Island Road, 1.05 miles east on Casual Branch Road, 250 feet north of road; elevation 177 feet; Elliott, S.C., 7.5-minute topographic quadrangle; lat. 34 degrees 06 minutes 13 seconds N. and long. 80 degrees 11 minutes 27 seconds W.

Ap—0 to 7 inches; very dark gray (10YR 3/1) sandy loam; weak fine granular structure; very friable; nonsticky, nonplastic; many fine and medium roots; very strongly acid; clear smooth boundary.

Eg—7 to 12 inches; light brownish gray (10YR 6/2) sandy loam; weak fine granular structure; very friable; nonsticky, nonplastic; many fine and few medium roots; many fine pores; very strongly acid; gradual wavy boundary.

Btg1—12 to 20 inches; gray (10YR 6/1) sandy loam; weak coarse subangular blocky structure; friable; slightly sticky, slightly plastic; few fine and medium roots; many coarse pores; few faint clay films on faces of peds; sand grains coated and bridged with clay; few medium prominent yellowish brown (10YR 5/6) masses of oxidized iron; very strongly acid; gradual wavy boundary.

Btg2—20 to 40 inches; gray (10YR 6/1) sandy clay loam; few small pockets of gray sandy loam; moderate medium subangular blocky structure; friable; slightly sticky, slightly plastic; few fine and medium roots; many fine pores; common distinct clay

Figure 20.—Profile of a soil in the Rains series.

films on faces of peds; common medium prominent yellowish brown (10YR 5/6) masses of oxidized iron; very strongly acid; gradual wavy boundary.

Btg3—40 to 52 inches; gray (10YR 6/1) sandy clay loam; moderate medium subangular blocky structure; friable; slightly sticky, slightly plastic; few fine pores; common distinct clay films on faces of peds; few fine and medium prominent red (2.5YR 4/6) and yellowish brown (10YR 5/6) masses of oxidized iron; very strongly acid; gradual wavy boundary.

Btg4—52 to 80 inches; gray (10YR 6/1) sandy clay loam; moderate medium subangular blocky structure; friable; slightly sticky, slightly plastic; few faint clay films on faces of peds; few medium prominent brownish yellow (10YR 6/6) masses of oxidized iron; very strongly acid; gradual wavy boundary.

Range in Characteristics

Thickness of surface and subsurface layers: 4 to 19 inches
Depth to top of argillic horizon: 4 to 19 inches
Depth to base of argillic horizon: 60 to more than 80 inches
Soil reaction: Very strongly acid or strongly acid throughout, except where lime has been applied
Depth to bedrock: More than 80 inches
Depth to seasonal high water table: At the surface to a depth of 1.0 foot

A or Ap horizon:
Color—hue of 10YR or 2.5Y, value of 2 to 4, and chroma of 1 or 2
Texture—sandy loam
Content and size of rock fragments—0 to 4 percent; mostly quartz pebbles

Eg horizon (where present):
Color—hue of 10YR or 2.5Y, value of 6, and chroma of 1 or 2

Texture—sandy loam or fine sandy loam
Content and size of rock fragments—0 to 4 percent; mostly quartz pebbles
Redoximorphic features—iron or clay depletions in shades of gray and masses of oxidized iron in shades of red, yellow, and brown

Btg horizon:
Color—hue of 10YR or 2.5Y, value of 5 to 7, and chroma of 1 or 2; or is neutral and has value of 5 to 7
Texture—sandy loam or sandy clay loam; clay loam or sandy clay in the lower part
Content and size of rock fragments—0 to 4 percent; mostly quartz pebbles
Redoximorphic features—masses of oxidized iron in shades of red, yellow, and brown

BCg horizon:
Color—hue of 10YR or 2.5Y, value of 5 to 7, and chroma of 1 or 2; or is neutral and has value of 5 to 7
Texture—sandy loam, fine sandy loam, sandy clay loam, or sandy clay
Content and size of rock fragments—0 to 4 percent; mostly quartz pebbles
Redoximorphic features—masses of oxidized iron in shades of red, yellow, and brown

Smithboro Series

Major land resource area: Southern Coastal Plain
Geomorphic setting: Marine terraces on coastal plains
Parent material: Clayey fluviomarine deposits
Drainage class: Somewhat poorly drained
Slowest saturated hydraulic conductivity: Moderately low
Depth class: Very deep
Slope: 0 to 2 percent
Commonly associated soils: Coxville and Goldsboro

Taxonomic Classification

Fine, kaolinitic, thermic Aeric Paleaquults

Typical Pedon

Smithboro sandy loam in an area of Smithboro sandy loam, 0 to 2 percent slopes; in Lee County, S.C., 7.0 miles north on Bethune Highway from its intersection with North Main Street in Bishopville, 2.1 miles east on Kelly Bridge Road, 1.25 miles north on Arrants Road, 400 feet west of road; elevation 195 feet; Lucknow, S.C., 7.5-minute topographic quadrangle; lat. 34 degrees 20 minutes 11 seconds N. and long. 80 degrees 15 minutes 48 seconds W.

Ap—0 to 3 inches; dark gray (10YR 4/1) sandy loam; weak medium granular structure; very friable; nonsticky, nonplastic; few very fine and fine roots throughout; few very fine low continuity tubular pores; very strongly acid; abrupt smooth boundary.
E—3 to 5 inches; light brownish gray (2.5Y 6/2) sandy loam; weak medium subangular blocky structure; friable; nonsticky, nonplastic; very strongly acid; abrupt smooth boundary.
Bt1—5 to 12 inches; light yellowish brown (2.5Y 6/4) clay loam; moderate medium subangular blocky structure; friable; slightly sticky, slightly plastic; few fine and medium roots throughout; few very fine low continuity tubular pores; common distinct clay films on faces of peds; few medium distinct light yellowish brown (2.5Y 6/2) iron depletions; few fine prominent reddish yellow (7.5YR 6/8) masses of oxidized iron; very strongly acid; clear wavy boundary.

Bt2—12 to 21 inches; olive yellow (2.5Y 6/8) clay; moderate medium subangular blocky structure; firm; slightly sticky, moderately plastic; few fine and medium roots throughout; few very fine low continuity tubular pores; many distinct clay films on faces of peds; light brownish gray (10YR 6/2) iron depletions; common medium prominent reddish yellow (7.5YR 6/8) masses of oxidized iron; very strongly acid; clear wavy boundary.

Btg1—21 to 41 inches; light brownish gray (2.5Y 6/2) clay; moderate medium subangular blocky structure; firm; slightly sticky, moderately plastic; few fine and medium roots throughout; few very fine low continuity tubular pores; many distinct brownish yellow (10YR 6/8) clay films on faces of peds; few medium prominent strong brown (7.5YR 5/8) and common coarse prominent brownish yellow (10YR 6/6) masses of oxidized iron; very strongly acid; clear wavy boundary.

Btg2—41 to 80 inches; light gray (2.5Y 7/1) clay; moderate medium subangular blocky structure; firm; slightly sticky, moderately plastic; few fine and medium roots throughout; few very fine low continuity tubular pores; common distinct brownish yellow (10YR 6/8) clay films on faces of peds; few medium prominent strong brown (7.5YR 5/8) and brownish yellow (10YR 6/6) masses of oxidized iron; very strongly acid.

Range in Characteristics

Thickness of surface and subsurface layers: 4 to 19 inches
Depth to top of argillic horizon: 4 to 19 inches
Depth to base of argillic horizon: 60 to more than 80 inches
Soil reaction: Very strongly acid or strongly acid throughout, except where lime has been applied
Depth to bedrock: More than 80 inches
Depth to seasonal high water table: 0.5 to 1.5 feet

A or Ap horizon:
Color—hue of 10YR, value of 4 or 5, and chroma of 1 or 2
Texture—sandy loam or fine sandy loam

E horizon (where present):
Color—hue of 2.5Y, value of 4 to 6, and chroma of 1 to 3
Texture—sandy loam or fine sandy loam.
Redoximorphic features (where present)—iron or clay depletions in shades of gray and masses of oxidized iron in shades of red, yellow, and brown

Bt horizon:
Color—hue of 2.5Y, value of 5 to 7, and chroma of 3 to 8
Texture—clay loam or clay
Redoximorphic features—iron or clay depletions in shades of gray and masses of oxidized iron in shades of red, yellow, and brown

Btg horizon:
Color—hue of 10YR or 2.5Y, value of 5 to 7, and chroma of 1 or 2
Texture—clay
Redoximorphic features—masses of oxidized iron in shades of red, yellow, and brown

State Series

Major land resource area: Southern Coastal Plain
Geomorphic setting: Stream terraces in river valleys
Parent material: Loamy alluvium
Drainage class: Well drained

Slowest saturated hydraulic conductivity: Moderately high
Depth class: Very deep
Slope: 0 to 2 percent
Commonly associated soils: Alaga, Eunola, Johns, and Kalmia

Taxonomic Classification

Fine-loamy, siliceous, semiactive, thermic Typic Hapludults

Typical Pedon

State loamy sand in an area of State-Eunola complex, 0 to 2 percent slopes, rarely flooded; in Lee County, S.C., 5.3 miles east on East Church Street from its intersection with South Main Street in Bishopville, 1.0 mile southeast on Wisacky Highway, 1.3 miles east on Ivanhoe Road, 100 feet south of road; elevation 160 feet; Bishopville East, S.C., 7.5-minute topographic quadrangle; lat. 34 degrees 10 minutes 33 seconds N. and long. 80 degrees 11 minutes 09 seconds W.

Ap—0 to 8 inches; brown (10YR 4/3) loamy sand; massive; friable; nonsticky, nonplastic; few very fine and fine roots throughout; very strongly acid; clear wavy boundary.

E—8 to 14 inches; light yellowish brown (10YR 6/4) loamy sand; massive; friable; nonsticky, nonplastic; few very fine and fine roots throughout; very strongly acid; clear wavy boundary.

Bt1—14 to 29 inches; yellowish brown (10YR 5/8) sandy clay loam; moderate medium subangular blocky structure; friable; slightly sticky, slightly plastic; common distinct clay films on faces of peds; strongly acid; gradual wavy boundary.

Bt2—29 to 49 inches; olive yellow (2.5Y 6/6) sandy loam; moderate medium subangular blocky structure; friable; slightly sticky, slightly plastic; common distinct clay films on faces of peds; moderately acid; gradual wavy boundary.

BCt—49 to 55 inches; olive yellow (2.5Y 6/6) sandy loam; weak medium subangular blocky structure; friable; slightly sticky; few distinct clay bridges between sand grains; light gray (10YR 7/2) iron depletions; common medium prominent strong brown (7.5YR 5/8) masses of oxidized iron; very strongly acid; gradual wavy boundary.

2C—55 to 80 inches; yellowish brown (10YR 5/8) loamy coarse sand; single grain; loose; nonsticky, nonplastic; light gray (10YR 7/2) iron depletions; common medium prominent strong brown (7.5YR 5/8) masses of oxidized iron; very strongly acid; clear wavy boundary.

Range in Characteristics

Thickness of sandy surface and subsurface layers: 8 to 19 inches
Depth to top of argillic horizon: 8 to 19 inches
Depth to base of argillic horizon: 30 to more than 60 inches
Depth to contrasting soil material (lithologic discontinuity): 40 to more than 80 inches
Soil reaction: Very strongly acid to moderately acid throughout, except where lime has been applied
Depth to bedrock: More than 80 inches
Depth to seasonal high water table: 3.5 to 6.0 feet

A or Ap horizon:
Color—hue of 7.5YR or 10YR, value of 3 to 6, and chroma of 2 to 6
Texture—loamy coarse sand, loamy sand, or sandy loam
Content and size of rock fragments—0 to 5 percent; mostly quartz pebbles

E horizon (where present):
Color—hue of 10YR, value of 6 or 7, and chroma of 3 or 4

Texture—loamy coarse sand, loamy sand, or sandy loam
Content and size of rock fragments—0 to 5 percent; mostly quartz pebbles

Bt horizon:
Color—hue of 7.5YR to 2.5Y or subhorizons of 5YR, value of 4 to 6, and chroma of 4 to 8
Texture—sandy loam or sandy clay loam
Content and size of rock fragments—0 to 5 percent; mostly quartz pebbles
Redoximorphic features—iron depletions in shades of gray and masses of oxidized iron in shades of red, yellow, and brown

BC horizon (where present):
Color—hue of 7.5YR to 2.5Y, value of 4 to 6, and chroma of 4 to 8
Texture—coarse sandy loam or sandy loam
Content and size of rock fragments—0 to 5 percent; mostly quartz pebbles
Redoximorphic features—iron depletions in shades of gray and masses of oxidized iron in shades of red, yellow, and brown

2C horizon:
Color—hue of 10YR or 2.5Y, value of 4 to 8, and chroma of 3 to 8
Texture—coarse sand, sand, or loamy coarse sand.
Content and size of rock fragments—0 to 14 percent; mostly quartz pebbles
Redoximorphic features—iron or clay depletions in shades of gray and masses of oxidized iron in shades of red, yellow, and brown

Note: State soils in this survey area are taxadjuncts because the content of resistant minerals in the mineralogy control section is higher than defined for the range of the series. This difference does not significantly affect the use, management, or interpretations of the soils. State soils are typically fine-loamy, mixed, semiactive, thermic Typic Hapludults.

Thursa Series

Major land resource area: Southern Coastal Plain
Geomorphic setting: Marine terraces on upper coastal plains
Parent material: Loamy fluviomarine deposits
Drainage class: Well drained
Slowest saturated hydraulic conductivity: Moderately high
Depth class: Very deep
Slope: 0 to 6 percent
Commonly associated soils: Dothan, Orangeburg, Rains, and Wagram

Taxonomic Classification

Fine-loamy, kaolinitic, thermic Typic Kandiudults

Typical Pedon

Thursa loamy sand in an area of Thursa loamy sand, 0 to 2 percent slopes; in Lee County, S.C., 1.2 miles west on West Church Street from its intersection with Main Street in Bishopville, 1.5 miles on Camden Highway, 0.2 mile south on Traub Road, 45 feet east of Traub Road; elevation 265 feet; Bishopville West, S.C., 7.5-minute topographic quadrangle; lat. 34 degrees 13 minutes 43 seconds N. and long. 80 degrees 17 minutes 14 seconds W.

Ap—0 to 10 inches; brown (10YR 5/3) loamy sand; weak medium subangular blocky structure; very friable; nonsticky, nonplastic; few fine and medium roots throughout; moderately acid; abrupt smooth boundary.

Bt1—10 to 28 inches; yellowish brown (10YR 5/8) sandy clay loam; moderate medium subangular blocky structure; friable; slightly sticky, slightly plastic; common distinct clay films on faces of peds; strongly acid; clear wavy boundary.

Bt2—28 to 35 inches; yellowish brown (10YR 5/8) sandy clay loam; few medium prominent red (2.5YR 4/8) mottles; moderate coarse subangular blocky structure; friable; slightly sticky, slightly plastic; common distinct clay films on faces of peds; 1 percent ironstone nodules; strongly acid; gradual wavy boundary.

Bt3—35 to 50 inches; yellowish red (5YR 5/6) sandy clay; few medium faint yellowish brown (10YR 5/6) mottles; moderate medium subangular blocky structure; friable; slightly sticky, slightly plastic; common prominent clay films on faces of peds; 1 percent ironstone nodules; strongly acid; gradual wavy boundary.

Bt4—50 to 80 inches; red (2.5YR 5/8) clay; few medium prominent yellowish brown (10YR 5/6) mottles; moderate medium subangular blocky structure; friable; slightly sticky, slightly plastic; common prominent clay films on faces of peds; 1 percent ironstone nodules; very strongly acid.

Range in Characteristics

Thickness of sandy surface and subsurface layers: 5 to 19 inches
Depth to top of argillic horizon: 5 to 19 inches
Depth to base of argillic horizon: 60 to more than 80 inches
Depth to top of kandic horizon: 5 to 19 inches
Soil reaction: Extremely acid to moderately acid throughout, except where lime has been applied
Depth to bedrock: More than 80 inches
Depth to seasonal high water table: More than 6.0 feet

A or Ap horizon:
Color—hue of 10YR, value of 4 or 5, and chroma of 2 or 3
Texture—sand, loamy sand, or sandy loam
Content and size of rock fragments—0 to 7 percent; mostly quartz pebbles and ironstone nodules

E horizon (where present):
Color—hue of 10YR, value of 6, and chroma of 4
Texture—sand, loamy sand, or sandy loam
Content and size of rock fragments—0 to 7 percent; mostly quartz pebbles and ironstone nodules

Bt horizon (upper part):
Color—hue of 7.5YR or 10YR, value of 4 or 5, and chroma of 6 or 8
Texture—sandy clay loam or clay loam
Content and size of rock fragments—0 to 7 percent; mostly quartz pebbles and ironstone nodules
Mottles (where present)—shades of red

Bt horizon (lower part):
Color—hue of 10R to 5YR, value of 4 or 5, and chroma of 6 or 8
Texture—sandy clay loam, clay loam, sandy clay, or clay
Content and size of rock fragments—0 to 7 percent; mostly quartz pebbles and ironstone nodules
Mottles (where present)—shades of yellow or brown

Troup Series

Major land resource area: Southern Coastal Plain and Carolina and Georgia Sand Hills

Geomorphic setting: Marine terraces on middle and upper coastal plains
Parent material: Loamy fluviomarine deposits
Drainage class: Somewhat excessively drained
Slowest saturated hydraulic conductivity: Moderately high
Depth class: Very deep
Slope: 0 to 15 percent
Commonly associated soils: Ailey, Alpin, Candor, Cowarts, and Dothan

Taxonomic Classification

Loamy, kaolinitic, thermic Grossarenic Kandiudults

Typical Pedon

Troup sand in an area of Troup sand, 0 to 6 percent slopes; in Lee County, S.C., 7.0 miles north on Bethune Highway from its intersection with North Main Street in Bishopville, 1.0 mile east on Kelly Bridge Road, 400 feet south of road; elevation 220 feet; Lucknow, S.C., 7.5-minute topographic quadrangle; lat. 34 degrees 18 minutes 58 seconds N. and long. 80 degrees 16 minutes 01 seconds W.

Ap—0 to 3 inches; dark gray (10YR 4/2) sand; single grain; loose; nonsticky, nonplastic; common fine roots; strongly acid; clear wavy boundary.
E1—3 to 8 inches; brown (10YR 5/3) sand; single grain; loose; nonsticky, nonplastic; common fine roots; very strongly acid; gradual wavy boundary.
E2—8 to 37 inches; very pale brown (10YR 7/4) sand; single grain; loose; nonsticky, nonplastic; common fine roots; few uncoated sand grains; very strongly acid; gradual wavy boundary.
E3—37 to 46 inches; very pale brown (10YR 7/4) sand; common medium distinct yellow (10YR 7/6) mottles; single grain; loose; nonsticky, nonplastic; few uncoated sand grains; very strongly acid; clear wavy boundary.
Bt1—46 to 53 inches; yellowish brown (10YR 5/6) sandy clay loam; moderate medium subangular blocky structure; friable; slightly sticky, slightly plastic; few fine pores; few faint clay films on faces of peds; very strongly acid; gradual wavy boundary.
Bt2—53 to 69 inches; strong brown (7.5YR 5/8) sandy clay loam; moderate medium subangular blocky structure; friable; slightly sticky, slightly plastic; few fine pores; few faint clay films on faces of peds; very strongly acid; gradual wavy boundary.
Bt3—69 to 80 inches; reddish yellow (7.5YR 6/8) sandy loam; weak medium subangular blocky structure; very friable; nonsticky, nonplastic; few fine pores; few faint clay bridges between sand grains; very strongly acid.

Range in Characteristics

Thickness of sandy surface and subsurface layers: 40 to 75 inches
Depth to top of argillic horizon: 40 to 75 inches
Depth to base of argillic horizon: 60 to 80 inches
Depth to top of kandic horizon: 40 to 74 inches
Soil reaction: Very strongly acid or strongly acid throughout, except where lime has been applied
Plinthite content: 0 to 5 percent in the Bt horizon
Depth to bedrock: More than 80 inches
Depth to seasonal high water table: More than 6.0 feet

A or Ap horizon:
Color—hue of 10YR, value of 3 to 5, and chroma of 2 to 4
Texture—sand

E horizon:
Color—hue of 7.5YR or 10YR, value of 4 to 8, and chroma of 3 to 6

Texture—sand
Mottles (where present)—shades of yellow and brown

Bt horizon:
Color—hue of 5YR to 10YR, value of 4 to 6, and chroma of 4 to 8
Texture—sandy loam or sandy clay loam

Vaucluse Series

Major land resource area: Carolina and Georgia Sand Hills and Southern Coastal Plain
Geomorphic setting: Marine terraces on upper coastal plains
Parent material: Loamy fluviomarine deposits
Drainage class: Well drained
Slowest saturated hydraulic conductivity: Low
Depth class: Very deep
Slope: 6 to 15 percent
Commonly associated soils: Ailey, Alpin, Candor, Cowarts, Dothan, Pelion, and Troup

Taxonomic Classification

Fine-loamy, kaolinitic, thermic Typic Kanhapludults

Typical Pedon

Vaucluse loamy sand in an area of Vaucluse loamy sand, 2 to 6 percent slopes; in Chesterfield County, S.C., 8.0 miles south of Chesterfield on South Carolina Highway 102 to the intersection of South Carolina Highway 102 and South Carolina Secondary Highway 22, 0.1 mile south on South Carolina Highway 102 from the intersection, right turn on a woods trail, 0.1 mile south, 100 feet west; elevation 240 feet; Patrick, S.C., 7.5-minute topographic quadrangle; lat. 34 degrees 37 minutes 22 seconds N. and long. 80 degrees 05 minutes 07 seconds W.

Ap—0 to 2 inches; dark gray (10YR 4/1) loamy sand; single grain; loose; nonsticky, nonplastic; many fine and medium roots; common fine pores; 1 percent ironstone gravel; extremely acid; clear wavy boundary.

E—2 to 6 inches; brownish yellow (10YR 6/6) loamy sand; single grain; loose; nonsticky, nonplastic; common fine and few medium and large roots; common fine pores; 2 percent quartz and ironstone gravel; very strongly acid; gradual wavy boundary.

Bt—6 to 16 inches; reddish yellow (5YR 6/8) sandy clay loam; weak medium subangular blocky structure; friable; slightly sticky, slightly plastic; few fine and medium roots; few faint clay films on faces of peds; few brittle peds; few medium prominent white (10YR 8/1) masses of kaolin; few medium faint brownish yellow (10YR 6/8) masses of oxidized iron; very strongly acid; gradual smooth boundary.

Btx—16 to 25 inches; red (2.5YR 4/8) sandy clay loam; weak medium subangular blocky structure; friable in part of the mass, and brittle, compact, and dense in about 40 percent of the mass; slightly sticky, slightly plastic; few fine roots; few fine pores; few faint clay films on faces of peds; few medium prominent white (10YR 8/1) masses of kaolin; common medium prominent brownish yellow (10YR 6/8) masses of oxidized iron; 1 percent ironstone gravel; very strongly acid; gradual wavy boundary.

BC—25 to 50 inches; red (2.5YR 5/8) sandy clay loam; weak coarse subangular blocky structure; very friable; slightly sticky, slightly plastic; few fine roots; few clean sand grains; few medium prominent white (10YR 8/1) masses of kaolin; few medium faint reddish yellow (5YR 6/8) masses of oxidized iron; very strongly acid; gradual wavy boundary.

C—50 to 80 inches; reddish yellow (5YR 6/8) sandy loam; massive; friable; nonsticky, nonplastic; few fine roots; few fine flakes of mica; few medium prominent white (10YR 8/1) masses of kaolin; few medium distinct yellow (10YR 7/6) masses of oxidized iron; very strongly acid.

Range in Characteristics

Thickness of sandy surface and subsurface layers: 4 to 19 inches
Depth to top of argillic horizon: 4 to 19 inches
Depth to base of argillic horizon: 40 to 75 inches
Depth to top of kandic horizon: 4 to 19 inches
Depth to densic materials: More than 40 inches
Depth to fragic soil properties: 15 to 35 inches
Soil reaction: Extremely acid to strongly acid throughout, except where lime has been applied
Depth to bedrock: More than 80 inches
Depth to seasonal high water table: More than 6.0 feet

A or Ap horizon:
Color—hue of 10YR or 2.5Y, value of 3 to 6, and chroma of 1 to 4
Texture—sand or loamy sand
Content and size of rock fragments—0 to 12 percent; mostly quartz pebbles and ironstone nodules

E horizon (where present):
Color—hue of 10YR or 2.5Y, value of 5 to 7, and chroma of 4 or 6
Texture—sand or loamy sand
Content and size of rock fragments—0 to 12 percent; mostly quartz pebbles and ironstone nodules

Bt horizon:
Color—hue of 2.5YR to 10YR, value of 4 to 7, and chroma of 4 to 8
Texture—sandy clay loam
Content and size of rock fragments—0 to 6 percent; mostly ironstone nodules
Other distinctive properties—0 to 20 percent, 1 to 20 mm, white noncemented masses of kaolin

Btx horizon:
Color—hue of 2.5YR to 10YR, value of 4 to 7, and chroma of 4 to 8
Texture—sandy loam or sandy clay loam
Content and size of rock fragments—0 to 6 percent; mostly ironstone nodules
Other distinctive properties—10 to 40 percent, by volume, firm, brittle peds; 0 to 20 percent, 1 to 20 mm, white noncemented masses of kaolin

BC horizon (where present):
Color—hue of 2.5YR to 10YR, value of 5 or 6, and chroma of 1 to 8
Texture—sandy loam, or sandy clay loam.
Content and size of rock fragments—0 to 6 percent; mostly ironstone nodules
Other distinctive properties—0 to 20 percent, 1 to 20 mm, white noncemented masses of kaolin

C or Cd horizon (where present):
Color—hue of 2.5YR to 10YR, value of 5 to 7, and chroma of 1 to 8
Texture—loamy sand, coarse sandy loam, sandy loam, sandy clay loam, or silty clay loam
Content and size of rock fragments—0 to 6 percent; mostly ironstone nodules
Redoximorphic features (where present)—masses of oxidized iron in shades of red, yellow, and brown

Other distinctive properties—0 to 20 percent, 1 to 20 mm, white noncemented masses of kaolin

Wagram Series

Major land resource area: Southern Coastal Plain
Geomorphic setting: Marine terraces on middle and upper coastal plains
Parent material: Loamy fluviomarine deposits
Drainage class: Well drained
Slowest saturated hydraulic conductivity: Moderately high
Depth class: Very deep
Slope: 0 to 4 percent
Commonly associated soils: Ailey, Candor, Fuquay, Norfolk, and Troup

Taxonomic Classification

Loamy, kaolinitic, thermic Arenic Kandiudults

Typical Pedon

Wagram sand in an area of Wagram sand, 0 to 4 percent slopes; in Lee County, S.C., 1.6 miles west on Browntown Road from its intersection with Sumter Highway, 1.0 mile north on Bull Run Drive, 0.2 mile north on farm road, 150 feet north of road; elevation 295 feet; Bishopville West, S.C., 7.5-minute topographic quadrangle; lat. 34 degrees 13 minutes 20 seconds N. and long. 80 degrees 18 minutes 06 seconds W.

Ap—0 to 4 inches; dark grayish brown (10YR 4/2) sand; single grain; loose; nonsticky, nonplastic; common medium and coarse roots; few very fine and fine pores; few clean sand grains; strongly acid; abrupt wavy boundary.

E—4 to 33 inches; light yellowish brown (10YR 6/4) sand; single grain; loose; nonsticky, nonplastic; few clean sand grains; strongly acid; abrupt wavy boundary.

Bt1—33 to 39 inches; brownish yellow (10YR 6/6) sandy clay loam; moderate medium subangular blocky structure; friable; slightly sticky, slightly plastic; few very fine pores; common distinct clay films on faces of peds; few clean sand grains; very strongly acid; clear wavy boundary.

Bt2—39 to 65 inches; yellowish brown (10YR 6/8) sandy clay loam; common medium faint strong brown (7.5YR 5/8) and few fine distinct yellowish red (5YR 5/8) mottles; moderate medium subangular blocky structure; friable; slightly sticky, slightly plastic; common distinct clay films on faces of peds; very strongly acid; clear wavy boundary.

Bt3—65 to 80 inches; yellowish brown (10YR 6/8) sandy clay loam; common coarse faint strong brown (7.5YR 5/8) and distinct yellowish red (5YR 5/8) mottles; moderate medium subangular blocky structure; friable; slightly sticky, slightly plastic; common distinct clay films on faces of peds; very strongly acid.

Range in Characteristics

Thickness of sandy surface and subsurface layers: 20 to 40 inches
Depth to top of argillic horizon: 20 to 40 inches
Depth to base of argillic horizon: 60 to 80 inches
Depth to top of kandic horizon: 20 to 40 inches
Soil reaction: Very strongly acid to moderately acid throughout, except where lime has been applied
Depth to bedrock: More than 80 inches
Depth to seasonal high water table: More than 6.0 feet

A or Ap horizon:
Color—hue of 10YR, value of 3 to 5, and chroma of 2 to 4

Texture—sand
Content and size of rock fragments—0 to 4 percent; mostly quartz pebbles

E horizon:
Color—hue of 10YR, value of 6 or 7, and chroma of 3 or 4
Texture—sand
Content and size of rock fragments—0 to 4 percent; mostly quartz pebbles

Bt horizon:
Color—hue of 7.5YR or 10YR, value of 5 or 6, and chroma of 6 or 8
Texture—sandy clay loam
Content and size of rock fragments—0 to 4 percent; mostly quartz pebbles
Mottles (where present)—shades of red

Formation of the Soils

This section describes the factors of soil formation and relates them to the soils in the survey area. It also discusses the processes of horizon differentiation and the geology of the survey area.

Factors of Soil Formation

Soils are formed by processes of the environment acting upon geologic agents, such as metamorphic, igneous, and sedimentary rocks and fluvial stream sediments. The characteristics of a soil are determined by the combined influence of parent material, climate, plant and animal life, relief, and time. These five factors are responsible for the profile development and chemical properties that differentiate soils (Buol and others, 1980).

Parent Material

Parent material is the unconsolidated mass in which a soil forms. In Lee County, parent material is a major factor in determining what kind of soil forms and can be correlated to some degree to geologic formations.

Parent material is largely responsible for the chemical and mineralogical composition of soils and for the major differences among the soils of the county. Major differences in parent material, such as differences in texture, can be observed in the field. Less distinct differences, such as differences in mineralogical composition, can be determined only by careful laboratory analysis.

Climate

Climate, particularly precipitation and temperature, affects the physical, chemical, and biological relationships in the soil. It influences the rate at which rocks weather and organic matter decomposes. The amount of leaching in a soil is related to the amount of rainfall and the movement of water through the soil. The effects of climate also control the kinds of plants and animals living in and on the soil. Temperature influences the kind and growth of organisms and the speed of chemical and physical reactions in the soil.

Plant and Animal Life

Plants and animals influence the formation and differentiation of soil horizons. The type and number of organisms in and on the soil are determined in part by climate and in part by the nature of the soil material, relief, and the age of the soil. Bacteria, fungi, and other micro-organisms aid in the weathering of rocks and in the decomposition of organic matter. The plants and animals that live on a soil are the primary source of organic material.

Plants largely determine the kinds and amounts of organic matter that are added to a soil under normal conditions and the way in which the organic matter is added. They

also are important for the changes of base status and for the leaching process of a soil.

Animals convert complex compounds into simpler forms, add organic matter to the soil, and modify certain chemical and physical properties of soil. In Lee County, most of the organic material accumulates on the surface. It is acted upon by microorganisms, fungi, earthworms, and other forms of life and by direct chemical reaction. It is mixed with the uppermost mineral part of the soil by the activities of earthworms and other small invertebrates.

Organic material decomposes rapidly in the county because of the moderate temperatures, the abundant moisture supply, and the character of the organic material. It decays so rapidly that little of it accumulates in the soil.

Relief

Relief causes differences in free drainage, surface runoff, soil temperature, and the extent of geologic erosion. Relief in Lee County is largely determined by the kind of underlying bedrock, the geology of the area, and the extent that streams dissect the landscape.

Relief affects the percolation of water through the profile. Water movement through the profile is important in soil development because it aids chemical reactions and is necessary for leaching.

Slopes in the county range from 0 to 15 percent. The upland soils that have slopes of less than 6 percent generally have deeper, better defined profiles than the steeper soils. Examples are the well developed Dothan, Noboco, Norfolk, and Orangeburg soils. Relief affects the depth of soils. On some soils that have slopes of 15 percent, geologic erosion removes soil material almost as fast as it forms. As a result, most of the strongly sloping to steep soils have a thin solum. Examples are Cowarts and Vaucluse soils.

Relief also affects drainage. For example, a high water table usually occurs in nearly level and gently sloping areas. Goldsboro and Lynchburg soils on uplands are moderately well drained or somewhat poorly drained because they are nearly level and water moves through them slowly.

Soils at the lower elevations are less sloping and receive runoff from the adjacent higher areas. This runoff tends to accumulate in the nearly level to slightly concave areas. The somewhat poorly drained Chewacla soils and the poorly drained Chastain soils on flood plains are in these areas.

Time

The length of time that soil material has been exposed to the soil-forming processes accounts for some differences between soils. The formation of a well defined profile, however, also depends on other factors. Less time is required for a profile to develop in coarse textured material than in similar but finer textured material, even if the environment is the same for both materials. Less time is required for a profile to develop in an area, such as Lee County, that is warm and humid and has a dense plant cover than in a cold, dry area that has a sparse plant cover.

Soils vary considerably in age. The length of time that a soil has been forming is generally reflected in the profile. Old soils generally have better defined horizons than young soils. In Lee County, the effects of time as a soil-forming factor are more apparent in the older soils that are in the broader parts of the uplands. Examples are Norfolk and Orangeburg soils. These soils have well defined horizons. In contrast, young soils, such as Johnston and Chastain soils, formed in recent alluvium on flood plains and have not been in place long enough to develop as completely as Norfolk and Orangeburg soils.

Processes of Soil Formation

Most of the soils in Lee County exhibit four major horizons: the A, E, B, and C horizons. These horizons can be subdivided to indicate variations within a horizon. An example is a Bt horizon, which is a subsoil layer that contains translocated clay from the horizon above the Bt horizon.

The A horizon is the surface layer. It has the largest accumulation of organic matter of all horizons. If the soil has been cleared and plowed, this layer is called the Ap horizon. Johnston soils are an example of soils that have a distinctive dark A or Ap horizon.

The E horizon is the zone of maximum leaching, or eluviation, of clay and iron. It forms directly below the surface layer and generally is the lightest colored horizon in the soil. Fuquay and Blanton soils have well expressed E horizons.

The B horizon underlies the A or E horizon. It commonly is called the subsoil. It is the horizon of maximum accumulation, or illuviation, of clay, iron, aluminum, and other compounds. Faceville and Thursa soils have well expressed B horizons. Some soils, such as Ailey soils, have a thin Bt horizon that is dense and brittle in parts. This horizon has a very low content of organic matter. It tends to be weakly cemented and is very hard when dry and slightly brittle when moist. It generally is slowly permeable.

The C horizon generally is below the B horizon. It includes sediments, saprolite, and consolidated bedrock and, when moist, can be dug with a spade. In Johnston soils, which do not have a B horizon, the C horizon is directly below the A horizon.

One or more soil-forming processes are involved in the formation of soil horizons. These processes are the accumulation of organic matter; the leaching of soluble material; the chemical weathering, mainly by hydrolysis, of primary minerals into silicate clay minerals; the translocation of silicate clay and some silt-sized particles from one horizon to another; and the reduction and transfer of iron. Some of these processes take place continually in all soils, but the number of active processes and the degree of their activity differ from one soil to another.

These processes have been active in the formation of most of the soils in Lee County. The interaction of the first four processes is indicated by the strongly expressed horizons in Thursa soils. All five processes have probably been active in the formation of the moderately well drained Goldsboro soils.

Some organic matter has accumulated in all of the soils in the survey area. Most of the soils contain moderate amounts of organic matter in the surface layer. The content of organic matter ranges from low, as in Faceville soils, to high, as in Dorovan soils.

Most of the soils in the survey area are acid in the upper layers, unless the surface layer has been limed.

The translocation of clay minerals is an important process in the development of many soils in the survey area. As clay minerals are removed from the A horizon, they accumulate as clay films on the faces of peds, in pores, and in root channels in the B horizon.

As silicate clay forms from primary minerals, some iron commonly is released as hydrated oxides. These oxides generally are red. Even if they occur in small amounts, they give the soil material a brownish color. They are largely responsible for the strong brown, yellowish brown, or reddish brown colors that are dominant in the subsoil of many soils in the survey area.

The reduction and transfer of iron have occurred in all of the soils that are not characterized by good natural drainage. This process, known as gleying, is evidenced by a gray matrix color and by iron or clay depletions. Examples of gleyed soils in Lee County are Coxville and Chastain soils. Some of the iron may be reoxidized and segregated and thus form yellow, brown, red, or other brightly colored masses of oxidized iron in an essentially gray matrix in the subsoil. Nodules or concretions of iron or manganese also commonly form as a result of this process. Soil features

associated with chemically reduced iron are referred to as redoximorphic features (Vepraskas, 1992).

Geology and Soils

Ralph H. Willoughby, project leader, South Carolina Department of Natural Resources, Geological Survey, helped prepare this section.

The soils in Lee County formed in sediments of the Atlantic Coastal Plain. These sediments were deposited during cycles of sea level changes, which were caused by tectonics and glaciation. The Cretaceous sediments were deposited during times when tectonics (rising and falling of the continental land surface) may have affected sea level. The Pliocene and younger sediments were deposited during times when glaciation affected sea level.

Although glaciers did not cover the survey area, glaciation affected sea level worldwide. The sea level dropped during periods of glaciation due to the volume of water held as ice in the glaciers. As a result, the land surface was subject to erosion, streams were down-cut, scarps formed, and various terraces became distinguishable. During interglacial periods, the climate was warmer and the sea level was several hundred feet higher. Sediments were deposited each time the sea covered the land. The deposited sediments formed into new geologic units. The coastal plain sediments were built up in cycles or sequences as new sediments were deposited over the older sediments.

The soils in Lee County formed in twelve geologic units that occur on two geomorphic surfaces. The geologic units are the Holocene to late Pleistocene fluvial deposits; the Holocene to late Pleistocene lakebed and inland dune deposits on uplands; the Marietta unit, or Bear Bluff Formation; the Duplin Formation; the Pinehurst Formation; remnants of the Altamaha Formation; the Congaree Formation; the Lang Syne Formation; the Sawdust Landing Formation; the Tar Heel Formation; and the Middendorf Formation.

Land surfaces in Lee County are parts of two local subprovinces of the Atlantic Coastal Plain Physiographic Province. The Middle Coastal Plain extends from the Surry Scarp to the Orangeburg Scarp at an elevation of approximately 250 feet (76 meters) and the Upper Coastal Plain extends inland from the Orangeburg Scarp. Holocene deposits occur locally in streams and wetlands throughout the county. Pliocene marine to fluvial sediments occur on the Middle Coastal Plain. Upper Cretaceous sediments, lower Cenozoic marine sediments, and some Pliocene windblown sand occur at the surface in the Upper Coastal Plain.

Upper Cretaceous sediments underlie all of Lee County and are exposed at the surface at lower and intermediate elevations in the Upper Coastal Plain. The Middendorf Formation and overlying Tar Heel Formation are exposed at the surface in much of the Upper Coastal Plain. The uppermost Cretaceous Sawdust Landing Formation as well as Cenozoic sediments (the Lang Syne Formation and Congaree Formation or Huber Formation) and remnants of the upper Cenozoic Miocene Altamaha Formation are at the surface in areas of higher elevation in the Upper Coastal Plain. These areas are called the High Hills of Santee and are located in western Lee County. Windblown or eolian sand of the Pinehurst Formation is at the surface locally in parts of the Upper Coastal Plain called the Sand Hills.

The Upper Cretaceous Sawdust Landing Formation underlies lower slopes of the High Hills of Santee and is poorly sorted, fine to coarse grained quartz sands that have white clay grains and mica. Upper Paleocene and lower or middle Eocene formations occupy the tops of the highest hills (Nystrom and Willoughby, 1992). Upland surfaces range up to an elevation of 440 feet (134 meters). Average relief in the High Hills area is about 168 feet per mile (32 meters per kilometer). The Paleocene Lang Syne Formation and the Eocene Congaree Formation, or Huber Formation, are poorly

sorted, fine to coarse grained sands that have white clay grains and mica. Patches of rounded quartz pebbles to quartz cobbles occur on some hilltops in loose, coarse, sandy soil. The pebbles and cobbles are most likely derived by erosional let-down from the Late to Middle Miocene Altamaha Formation, which otherwise is absent in the High Hills of Santee. The High Hills are dissected, erosional remnants that were carved by erosion after the Altamaha Formation was deposited (Early to Middle Miocene) and before the Duplin Formation was deposited (Early Pliocene). Red, deeply weathered soils occur on the upland surfaces and side slopes. Faceville, Lucy, and Nankin soils are the major soils that compose the High Hills formations. These soils have loamy or clayey subsoils.

The Upper Cretaceous Middendorf Formation and the Tar Heel Formation are found on the dissected slopes of both the Upper Coastal Plain and the Sand Hills regions. These formations consist of red, thick crossbedded sands that have white kaolin grains (Prowell, 2003). The sands are interbedded with white clays and are deeply weathered. Water seeping downward through the unit removed the clayey portion near the ground surface and transported the clay minerals to deeper parts of the unit. Ailey, Cowarts, and Vaucluse soils are the major soils formed in the Middendorf and Tar Heel Formations. These soils are on sloping to steep slopes and have loamy subsoils.

Upper Coastal Plain

The pre-Pliocene Upper Coastal Plain has nearly level to gently sloping upland surfaces. The land surface differs notably from that of the Middle Coastal Plain because it is dissected. The elevation of the surfaces ranges from about 250 feet (76 meters) at the Orangeburg scarp to about 350 feet (107 meters) in the northwestern part of the county. Average relief is about 141 feet per mile (27 meters per kilometer). Carolina Bays occur in the Upper Coastal Plain but are less common than on other surfaces. Barnwell, Dothan, Fuquay, and Thursa soils are the major soils that formed in the Upper Coastal Plain. These soils have a loamy or clayey subsoil.

The late Miocene to early Pliocene Pinehurst Formation occurs locally in the Upper Coastal Plain. The Pinehurst Formation is of windblown or eolian origin. The area where it occurs is called Carolina and Georgia Sand Hills. In Lee County, the land surface primarily is gently sloping. The deep, sandy soils are droughty and support drought-tolerant vegetation such as longleaf pine and turkey oak trees. Alpin and Candor soils are the major soils formed in the Pinehurst Formation. These soils have sandy subsoils.

Middle Coastal Plain

The Middle Coastal Plain has nearly level upland surfaces. The land surface has been dissected very little. Average relief is 3.5 feet per mile (0.67 meters per kilometer). The Duplin Formation and Marietta unit underlie the Middle Coastal Plain.

The Duplin Formation is extensive in the county. It is early Pliocene in age and was deposited about 2.8 to 3.6 million years ago (Owens, 1989). The elevation is about 250 feet (76 meters) at the base of the Orangeburg Scarp in the northwestern part of the county, about 140 feet (43 meters) at the base of the Mechanicsville Scarp, and about 160 feet (49 meters) in the southeastern part of the county where fluvial deposits occur. The land surface is broad and slopes seaward. Carolina Bays are abundant on the land surface. The formation generally is loamy but includes interbedded clays. Noboco, Norfolk, and Rains soils are the major soils formed in the Duplin Formation.

The Marietta unit, or Bear Bluff Formation, occurs in the southeastern part of Lee County, south of Elliott, and is bounded to the west by the Black River and to the east by the Lynches River. The Marietta unit, or Bear Bluff Formation, is early Pliocene in age and was deposited approximately 2.4 to 1.8 million years ago (McCarten and

others, 1984). This upper Pliocene formation has three facies from bottom to top: a shelly marine facies, a barrier facies, and a fluvial facies. In Lee County, the marine beds of the Marietta unit extend landward to the base of the Mechanicsville Scarp at approximately 135 to 140 feet (41 to 43 meters) above sea level. The lower elevation of the surface ranges to about 120 feet (36 meters) before passing out of the county to the southeast. In Lee County, the fluvial facies at the surface ranges from about 135 to 160 feet (41 to 49 meters) above sea level. The land surface is relatively flat. Goldsboro, Lynchburg, and Rains soils are the major soils that formed in the Marietta unit. These soils have loamy subsoils.

Generally, the Coastal Plain has two types of river systems. Rivers originate either in the Coastal Plain or in the Piedmont and Blue Ridge. Lee County includes both of these river systems. The Holocene to late Pleistocene fluvial deposits were accumulated in stream channels or adjacent to rivers and streams in areas of the flood plains. The deposits consist of sand, gravel, and clay and were deposited within the past 10,000 years. The deposits occur in wide areas on the flood plain along the Lynches River and have headwaters in the Piedmont. They are adjacent to the rivers and streams but are different from the higher terraces that occur on these river bottoms. Chewacla and Chastain soils are the major soils that formed in these flood plain deposits. These soils have loamy or clayey subsoils. Eunola, Johns, Kalmia, Myatt, and State soils formed in the terrace deposits.

On the flood plains of streams originating in the Coastal Plain, the soils have thick, black surfaces that have abundant organic matter. The substrata of the soils are primarily sandy but can be stratified with loamy sediments. Johnston soils are the major soils formed in these deposits.

Holocene to late Pleistocene Carolina Bay deposits occur in elongated, oval depressions and in the commonly associated elevated sand rims. Carolina Bay deposits include lake deposits in the lakebeds, some eolian or fluvial sand in lakebeds, and eolian sand in the elevated rims outside the lakebeds. The Carolina Bay deposits in Lee County were formed by multidirectional, though dominantly southwesterly, winds acting on ponded water that had fluctuating water levels on a flat or nearly flat landscape. Carolina Bays are common to abundant on the Marietta unit, or Bear Bluff Formation, and on the Duplin Formation. They are less common in the Upper Coastal Plain where the higher slope of land surfaces, the greater elevations, and the more active erosional dissection hinder the formation and preservation of Carolina Bays. Rains and Coxville soils are the major soils found in the interiors of Carolina Bays. These soils have loamy or clayey subsoils.

Eolian sand deposits occur on the elevated rims of some Carolina Bays as well as on the eastern side of both Scape Ore Swamp and Lynches River. Alaga, Bonneau, Foxworth, and Lakeland soils are the major soils formed in the eolian deposits. These soils have sandy or loamy subsoils.

Holocene to late Pleistocene lakebed deposits in rounded depressions occur in small, ponded depressions. The lakebeds of these deposits differ from Carolina Bay lakebeds because they have rounded rather than elongated or oval outlines and they lack a sand rim. The rounded depressions formed on a flat or nearly flat landscape that had little influence from erosional dissection. In Lee County, these rounded depressions commonly occur at elevations below about 160 feet (49 meters) on the Duplin Formation and on the Marietta unit, or Bear Bluff Formation. Sometimes called gum ponds, these depressions may be forming in part as a response to the dissolution of calcium carbonate in the marine facies in the underlying Pliocene marine sediments. Coxville soils are the major soils formed in these rounded depressions. These soils have clayey subsoils.

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Glossary

Many of the terms relating to landforms, geology, and geomorphology are defined in more detail in the "National Soil Survey Handbook" (available in local offices of the Natural Resources Conservation Service or on the Internet).

ABC soil. A soil having an A, a B, and a C horizon.

AC soil. A soil having only an A and a C horizon. Commonly, such soil formed in recent alluvium or on steep, rocky slopes.

Aeration, soil. The exchange of air in soil with air from the atmosphere. The air in a well aerated soil is similar to that in the atmosphere; the air in a poorly aerated soil is considerably higher in carbon dioxide and lower in oxygen.

Animal unit month (AUM). The amount of forage required by one mature cow of approximately 1,000 pounds weight, with or without a calf, for 1 month.

Aquic conditions. Current soil wetness characterized by saturation, reduction, and redoximorphic features.

Argillic horizon. A subsoil horizon characterized by an accumulation of illuvial clay.

Available water capacity (available moisture capacity). The capacity of soils to hold water available for use by most plants. It is commonly defined as the difference between the amount of soil water at field moisture capacity and the amount at wilting point. It is commonly expressed as inches of water per inch of soil. The capacity, in inches, in a 60-inch profile or to a limiting layer is expressed as:

Very low	0 to 3
Low	3 to 6
Moderate	6 to 9
High	9 to 12
Very high	more than 12

Backslope. The position that forms the steepest and generally linear, middle portion of a hillslope. In profile, backslopes are commonly bounded by a convex shoulder above and a concave footslope below.

Basal area. The area of a cross section of a tree, generally referring to the section at breast height and measured outside the bark. It is a measure of stand density, commonly expressed in square feet.

Base saturation. The degree to which material having cation-exchange properties is saturated with exchangeable bases (sum of Ca, Mg, Na, and K), expressed as a percentage of the total cation-exchange capacity.

Base slope (geomorphology). A geomorphic component of hills consisting of the concave to linear (perpendicular to the contour) slope that, regardless of the lateral shape, forms an apron or wedge at the bottom of a hillside dominated by colluvium and slope-wash sediments (for example, slope alluvium).

Bedding plane. A planar or nearly planar bedding surface that visibly separates each successive layer of stratified sediment or rock (of the same or different lithology) from the preceding or following layer; a plane of deposition. It commonly marks a change in the circumstances of deposition and may show a parting, a color difference, a change in particle size, or various combinations of these. The term is

commonly applied to any bedding surface, even one that is conspicuously bent or deformed by folding.

Bedrock. The solid rock that underlies the soil and other unconsolidated material or that is exposed at the surface.

Bisequum. Two sequences of soil horizons, each of which consists of an illuvial horizon and the overlying eluvial horizons.

Boulders. Rock fragments larger than 2 feet (60 centimeters) in diameter.

Breast height. An average height of 4.5 feet above the ground surface; the point on a tree where diameter measurements are ordinarily taken.

Canopy. The leafy crown of trees or shrubs. (See Crown.)

Capillary water. Water held as a film around soil particles and in tiny spaces between particles. Surface tension is the adhesive force that holds capillary water in the soil.

Catena. A sequence, or “chain,” of soils on a landscape that formed in similar kinds of parent material and under similar climatic conditions but that have different characteristics as a result of differences in relief and drainage.

Cation. An ion carrying a positive charge of electricity. The common soil cations are calcium, potassium, magnesium, sodium, and hydrogen.

Cation-exchange capacity. The total amount of exchangeable cations that can be held by the soil, expressed in terms of milliequivalents per 100 grams of soil at neutrality (pH 7.0) or at some other stated pH value. The term, as applied to soils, is synonymous with base-exchange capacity but is more precise in meaning.

Chemical treatment. Control of unwanted vegetation through the use of chemicals.

Chiseling. Tillage with an implement having one or more soil-penetrating points that shatter or loosen hard, compacted layers to a depth below normal plow depth.

Clay. As a soil separate, the mineral soil particles less than 0.002 millimeter in diameter. As a soil textural class, soil material that is 40 percent or more clay, less than 45 percent sand, and less than 40 percent silt.

Clay depletions. See Redoximorphic features.

Clay film. A thin coating of oriented clay on the surface of a soil aggregate or lining pores or root channels. Synonyms: clay coating, clay skin.

Coarse textured soil. Sand or loamy sand.

Cobble (or cobblestone). A rounded or partly rounded fragment of rock 3 to 10 inches (7.6 to 25 centimeters) in diameter.

COLE (coefficient of linear extensibility). See Linear extensibility.

Complex, soil. A map unit of two or more kinds of soil or miscellaneous areas in such an intricate pattern or so small in area that it is not practical to map them separately at the selected scale of mapping. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas.

Concretions. See Redoximorphic features.

Conservation cropping system. Growing crops in combination with needed cultural and management practices. In a good conservation cropping system, the soil-improving crops and practices more than offset the effects of the soil-depleting crops and practices. Cropping systems are needed on all tilled soils. Soil-improving practices in a conservation cropping system include the use of rotations that contain grasses and legumes and the return of crop residue to the soil. Other practices include the use of green manure crops of grasses and legumes, proper tillage, adequate fertilization, and weed and pest control.

Conservation tillage. A tillage system that does not invert the soil and that leaves a protective amount of crop residue on the surface throughout the year.

Consistence, soil. Refers to the degree of cohesion and adhesion of soil material and its resistance to deformation when ruptured. Consistence includes resistance of soil material to rupture and to penetration; plasticity, toughness, and stickiness of puddled soil material; and the manner in which the soil material behaves when

subject to compression. Terms describing consistence are defined in the "Soil Survey Manual."

Contour stripcropping. Growing crops in strips that follow the contour. Strips of grass or close-growing crops are alternated with strips of clean-tilled crops or summer fallow.

Control section. The part of the soil on which classification is based. The thickness varies among different kinds of soil, but for many it is that part of the soil profile between depths of 10 inches and 40 or 80 inches.

Corrosion (geomorphology). A process of erosion whereby rocks and soil are removed or worn away by natural chemical processes, especially by the solvent action of running water, but also by other reactions, such as hydrolysis, hydration, carbonation, and oxidation.

Corrosion (soil survey interpretations). Soil-induced electrochemical or chemical action that dissolves or weakens concrete or uncoated steel.

Cover crop. A close-growing crop grown primarily to improve and protect the soil between periods of regular crop production, or a crop grown between trees and vines in orchards and vineyards.

Crop residue management. Returning crop residue to the soil, which helps to maintain soil structure, organic matter content, and fertility and helps to control erosion.

Cropping system. Growing crops according to a planned system of rotation and management practices.

Culmination of the mean annual increment (CMAI). The average annual increase per acre in the volume of a stand. Computed by dividing the total volume of the stand by its age. As the stand increases in age, the mean annual increment continues to increase until mortality begins to reduce the rate of increase. The point where the stand reaches its maximum annual rate of growth is called the culmination of the mean annual increment.

Cutbanks cave (in tables). The walls of excavations tend to cave in or slough.

Dense layer (in tables). A very firm, massive layer that has a bulk density of more than 1.8 grams per cubic centimeter. Such a layer affects the ease of digging and can affect filling and compacting.

Depth, soil. Generally, the thickness of the soil over bedrock. Very deep soils are more than 60 inches deep over bedrock; deep soils, 40 to 60 inches; moderately deep, 20 to 40 inches; shallow, 10 to 20 inches; and very shallow, less than 10 inches.

Diversion (or diversion terrace). A ridge of earth, generally a terrace, built to protect downslope areas by diverting runoff from its natural course.

Drainage class (natural). Refers to the frequency and duration of wet periods under conditions similar to those under which the soil formed. Alterations of the water regime by human activities, either through drainage or irrigation, are not a consideration unless they have significantly changed the morphology of the soil. Seven classes of natural soil drainage are recognized—*excessively drained, somewhat excessively drained, well drained, moderately well drained, somewhat poorly drained, poorly drained,* and *very poorly drained*. These classes are defined in the "Soil Survey Manual."

Drainage, surface. Runoff, or surface flow of water, from an area.

Drainageway. A general term for a course or channel along which water moves in draining an area. A term restricted to relatively small, linear depressions that at some time move concentrated water and either do not have a defined channel or have only a small defined channel.

Drift. A general term applied to all mineral material (clay, silt, sand, gravel, and boulders) transported by a glacier and deposited directly by or from the ice or transported by running water emanating from a glacier. Drift includes unstratified material (till) that forms moraines and stratified deposits that form outwash plains,

eskers, kames, varves, and glaciofluvial sediments. The term is generally applied to Pleistocene glacial deposits in areas that no longer contain glaciers.

Duff. A generally firm organic layer on the surface of mineral soils. It consists of fallen plant material that is in the process of decomposition and includes everything from the litter on the surface to underlying pure humus.

Eluviation. The movement of material in true solution or colloidal suspension from one place to another within the soil. Soil horizons that have lost material through eluviation are eluvial; those that have received material are illuvial.

Endosaturation. A type of saturation of the soil in which all horizons between the upper boundary of saturation and a depth of 2 meters are saturated.

Eolian deposit. Sand-, silt-, or clay-sized clastic material transported and deposited primarily by wind, commonly in the form of a dune or a sheet of sand or loess.

Ephemeral stream. A stream, or reach of a stream, that flows only in direct response to precipitation. It receives no long-continued supply from melting snow or other source, and its channel is above the water table at all times.

Episaturation. A type of saturation indicating a perched water table in a soil in which saturated layers are underlain by one or more unsaturated layers within 2 meters of the surface.

Erosion. The wearing away of the land surface by water, wind, ice, or other geologic agents and by such processes as gravitational creep.

Erosion (geologic). Erosion caused by geologic processes acting over long geologic periods and resulting in the wearing away of mountains and the building up of such landscape features as flood plains and coastal plains. Synonym: natural erosion.

Erosion (accelerated). Erosion much more rapid than geologic erosion, mainly as a result of human or animal activities or of a catastrophe in nature, such as a fire, that exposes the surface.

Erosion surface. A land surface shaped by the action of erosion, especially by running water.

Escarpment. A relatively continuous and steep slope or cliff breaking the general continuity of more gently sloping land surfaces and resulting from erosion or faulting. Most commonly applied to cliffs produced by differential erosion. Synonym: scarp.

Fertility, soil. The quality that enables a soil to provide plant nutrients, in adequate amounts and in proper balance, for the growth of specified plants when light, moisture, temperature, tilth, and other growth factors are favorable.

Fibric soil material (peat). The least decomposed of all organic soil material. Peat contains a large amount of well preserved fiber that is readily identifiable according to botanical origin. Peat has the lowest bulk density and the highest water content at saturation of all organic soil material.

Field moisture capacity. The moisture content of a soil, expressed as a percentage of the ovendry weight, after the gravitational, or free, water has drained away; the field moisture content 2 or 3 days after a soaking rain; also called *normal field capacity, normal moisture capacity,* or *capillary capacity*.

Fine textured soil. Sandy clay, silty clay, or clay.

Firebreak. An area cleared of flammable material to stop or help control creeping or running fires. It also serves as a line from which to work and to facilitate the movement of firefighters and equipment. Designated roads also serve as firebreaks.

Flood plain. The nearly level plain that borders a stream and is subject to flooding unless protected artificially.

Flood-plain landforms. A variety of constructional and erosional features produced by stream channel migration and flooding. Examples include backswamps, flood-

plain splays, meanders, meander belts, meander scrolls, oxbow lakes, and natural levees.

Fluvial. Of or pertaining to rivers or streams; produced by stream or river action.

Foothills. A region of steeply sloping hills that fringes a mountain range or high-plateau escarpment. The hills have relief of as much as 1,000 feet (300 meters).

Footslope. The concave surface at the base of a hillslope. A footslope is a transition zone between upslope sites of erosion and transport (shoulders and backslopes) and downslope sites of deposition (toeslopes).

Forb. Any herbaceous plant not a grass or a sedge.

Forest type. A stand of trees similar in composition and development because of given physical and biological factors by which it may be differentiated from other stands.

Fragipan. A loamy, brittle subsurface horizon low in porosity and content of organic matter and low or moderate in clay but high in silt or very fine sand. A fragipan appears cemented and restricts roots. When dry, it is hard or very hard and has a higher bulk density than the horizon or horizons above. When moist, it tends to rupture suddenly under pressure rather than to deform slowly.

Genesis, soil. The mode of origin of the soil. Refers especially to the processes or soil-forming factors responsible for the formation of the solum, or true soil, from the unconsolidated parent material.

Gleyed soil. Soil that formed under poor drainage, resulting in the reduction of iron and other elements in the profile and in gray colors.

Grassed waterway. A natural or constructed waterway, typically broad and shallow, seeded to grass as protection against erosion. Conducts surface water away from cropland.

Gravel. Rounded or angular fragments of rock as much as 3 inches (2 millimeters to 7.6 centimeters) in diameter. An individual piece is a pebble.

Ground water. Water filling all the unblocked pores of the material below the water table.

Gully. A small channel with steep sides caused by erosion and cut in unconsolidated materials by concentrated but intermittent flow of water. The distinction between a gully and a rill is one of depth. A gully generally is an obstacle to farm machinery and is too deep to be obliterated by ordinary tillage; a rill is of lesser depth and can be smoothed over by ordinary tillage.

Hard to reclaim (in tables). Reclamation is difficult after the removal of soil for construction and other uses. Revegetation and erosion control are extremely difficult.

Hardpan. A hardened or cemented soil horizon, or layer. The soil material is sandy, loamy, or clayey and is cemented by iron oxide, silica, calcium carbonate, or other substance.

Head slope (geomorphology). A geomorphic component of hills consisting of a laterally concave area of a hillside, especially at the head of a drainageway. The overland waterflow is converging.

Hemic soil material (mucky peat). Organic soil material intermediate in degree of decomposition between the less decomposed fibric material and the more decomposed sapric material.

Hill. A generic term for an elevated area of the land surface, rising as much as 1,000 feet above surrounding lowlands, commonly of limited summit area and having a well defined outline. Slopes are generally more than 15 percent. The distinction between a hill and a mountain is arbitrary and may depend on local usage.

Hillslope. A generic term for the steeper part of a hill between its summit and the drainage line, valley flat, or depression floor at the base of a hill.

Horizon, soil. A layer of soil, approximately parallel to the surface, having distinct characteristics produced by soil-forming processes. In the identification of soil

horizons, an uppercase letter represents the major horizons. Numbers or lowercase letters that follow represent subdivisions of the major horizons. An explanation of the subdivisions is given in the "Soil Survey Manual." The major horizons of mineral soil are as follows:

O horizon.—An organic layer of fresh and decaying plant residue.

A horizon.—The mineral horizon at or near the surface in which an accumulation of humified organic matter is mixed with the mineral material. Also, a plowed surface horizon, most of which was originally part of a B horizon.

E horizon.—The mineral horizon in which the main feature is loss of silicate clay, iron, aluminum, or some combination of these.

B horizon.—The mineral horizon below an A horizon. The B horizon is in part a layer of transition from the overlying A to the underlying C horizon. The B horizon also has distinctive characteristics, such as (1) accumulation of clay, sesquioxides, humus, or a combination of these; (2) prismatic or blocky structure; (3) redder or browner colors than those in the A horizon; or (4) a combination of these.

C horizon.—The mineral horizon or layer, excluding indurated bedrock, that is little affected by soil-forming processes and does not have the properties typical of the overlying soil material. The material of a C horizon may be either like or unlike that in which the solum formed. If the material is known to differ from that in the solum, an Arabic numeral, commonly a 2, precedes the letter C.

Humus. The well decomposed, more or less stable part of the organic matter in mineral soils.

Hydrologic soil groups. Refers to soils grouped according to their runoff potential. The soil properties that influence this potential are those that affect the minimum rate of water infiltration on a bare soil during periods after prolonged wetting when the soil is not frozen. These properties are depth to a seasonal high water table, the infiltration rate and permeability after prolonged wetting, and depth to a very slowly permeable layer. The slope and the kind of plant cover are not considered but are separate factors in predicting runoff.

Illuviation. The movement of soil material from one horizon to another in the soil profile. Generally, material is removed from an upper horizon and deposited in a lower horizon.

Infiltration. The downward entry of water into the immediate surface of soil or other material, as contrasted with percolation, which is movement of water through soil layers or material.

Infiltration rate. The rate at which water penetrates the surface of the soil at any given instant, usually expressed in inches per hour. The rate can be limited by the infiltration capacity of the soil or the rate at which water is applied at the surface.

Intake rate. The average rate of water entering the soil under irrigation. Most soils have a fast initial rate; the rate decreases with application time. Therefore, intake rate for design purposes is not a constant but is a variable depending on the net irrigation application. The rate of water intake, in inches per hour, is expressed as follows:

Less than 0.2	very low
0.2 to 0.4	low
0.4 to 0.75	moderately low
0.75 to 1.25	moderate
1.25 to 1.75	moderately high
1.75 to 2.5	high
More than 2.5	very high

Interfluve. A landform composed of the relatively undissected upland or ridge between two adjacent valleys containing streams flowing in the same general

direction. An elevated area between two drainageways that sheds water to those drainageways.

Interfluve (geomorphology). A geomorphic component of hills consisting of the uppermost, comparatively level or gently sloping area of a hill; shoulders of backwearing hillslopes can narrow the upland or can merge, resulting in a strongly convex shape.

Intermittent stream. A stream, or reach of a stream, that does not flow year-round but that is commonly dry for 3 or more months out of 12 and whose channel is generally below the local water table. It flows only during wet periods or when it receives ground-water discharge or long, continued contributions from melting snow or other surface and shallow subsurface sources.

Iron depletions. See Redoximorphic features.

Irrigation. Application of water to soils to assist in production of crops.

K_{sat}. Saturated hydraulic conductivity. (See Permeability.)

Lacustrine deposit. Material deposited in lake water and exposed when the water level is lowered or the elevation of the land is raised.

Leaching. The removal of soluble material from soil or other material by percolating water.

Linear extensibility. Refers to the change in length of an unconfined clod as moisture content is decreased from a moist to a dry state. Linear extensibility is used to determine the shrink-swell potential of soils. It is an expression of the volume change between the water content of the clod at $^1/_3$- or $^1/_{10}$-bar tension (33kPa or 10kPa tension) and oven dryness. Volume change is influenced by the amount and type of clay minerals in the soil. The volume change is the percent change for the whole soil. If it is expressed as a fraction, the resulting value is COLE, coefficient of linear extensibility.

Liquid limit. The moisture content at which the soil passes from a plastic to a liquid state.

Loam. Soil material that is 7 to 27 percent clay particles, 28 to 50 percent silt particles, and less than 52 percent sand particles.

Low strength. The soil is not strong enough to support loads.

Low-residue crops. Such crops as corn used for silage, peas, beans, and potatoes. Residue from these crops is not adequate to control erosion until the next crop in the rotation is established. These crops return little organic matter to the soil.

Mass movement. A generic term for the dislodgment and downslope transport of soil and rock material as a unit under direct gravitational stress.

Masses. See Redoximorphic features.

Medium textured soil. Very fine sandy loam, loam, silt loam, or silt.

Mineral soil. Soil that is mainly mineral material and low in organic material. Its bulk density is more than that of organic soil.

Minimum tillage. Only the tillage essential to crop production and prevention of soil damage.

Miscellaneous area. A kind of map unit that has little or no natural soil and supports little or no vegetation.

Moderately coarse textured soil. Coarse sandy loam, sandy loam, or fine sandy loam.

Moderately fine textured soil. Clay loam, sandy clay loam, or silty clay loam.

Morphology, soil. The physical makeup of the soil, including the texture, structure, porosity, consistence, color, and other physical, mineral, and biological properties of the various horizons, and the thickness and arrangement of those horizons in the soil profile.

Mottling, soil. Irregular spots of different colors that vary in number and size. Descriptive terms are as follows: abundance—*few, common,* and *many;* size—*fine, medium,* and *coarse;* and contrast—*faint, distinct,* and *prominent*. The size

measurements are of the diameter along the greatest dimension. *Fine* indicates less than 5 millimeters (about 0.2 inch); *medium,* from 5 to 15 millimeters (about 0.2 to 0.6 inch); and *coarse,* more than 15 millimeters (about 0.6 inch).

Muck. Dark, finely divided, well decomposed organic soil material. (See Sapric soil material.)

Munsell notation. A designation of color by degrees of three simple variables—hue, value, and chroma. For example, a notation of 10YR 6/4 is a color with hue of 10YR, value of 6, and chroma of 4.

Neutral soil. A soil having a pH value of 6.6 to 7.3. (See Reaction, soil.)

Nodules. See Redoximorphic features.

Nose slope (geomorphology). A geomorphic component of hills consisting of the projecting end (laterally convex area) of a hillside. The overland waterflow is predominantly divergent. Nose slopes consist dominantly of colluvium and slope-wash sediments (for example, slope alluvium).

Nutrient, plant. Any element taken in by a plant essential to its growth. Plant nutrients are mainly nitrogen, phosphorus, potassium, calcium, magnesium, sulfur, iron, manganese, copper, boron, and zinc obtained from the soil and carbon, hydrogen, and oxygen obtained from the air and water.

Organic matter. Plant and animal residue in the soil in various stages of decomposition. The content of organic matter in the surface layer is described as follows:

Very low	less than 0.5 percent
Low	0.5 to 1.0 percent
Moderately low	1.0 to 2.0 percent
Moderate	2.0 to 4.0 percent
High	4.0 to 8.0 percent
Very high	more than 8.0 percent

Parent material. The unconsolidated organic and mineral material in which soil forms.

Peat. Unconsolidated material, largely undecomposed organic matter, that has accumulated under excess moisture. (See Fibric soil material.)

Ped. An individual natural soil aggregate, such as a granule, a prism, or a block.

Pedon. The smallest volume that can be called “a soil.” A pedon is three dimensional and large enough to permit study of all horizons. Its area ranges from about 10 to 100 square feet (1 square meter to 10 square meters), depending on the variability of the soil.

Permeability. The quality of the soil that enables water or air to move downward through the profile. The rate at which a saturated soil transmits water is accepted as a measure of this quality. In soil physics, the rate is referred to as “saturated hydraulic conductivity,” which is defined in the “Soil Survey Manual.” In line with conventional usage in the engineering profession and with traditional usage in published soil surveys, this rate of flow continues to be expressed as “permeability.” Terms describing permeability, measured in inches per hour, are as follows:

Impermeable	less than 0.0015 inch
Very slow	0.0015 to 0.06 inch
Slow	0.06 to 0.2 inch
Moderately slow	0.2 to 0.6 inch
Moderate	0.6 inch to 2.0 inches
Moderately rapid	2.0 to 6.0 inches
Rapid	6.0 to 20 inches
Very rapid	more than 20 inches

pH value. A numerical designation of acidity and alkalinity in soil. (See Reaction, soil.)

Phase, soil. A subdivision of a soil series based on features that affect its use and management, such as slope, stoniness, and flooding.

Piping (in tables). Formation of subsurface tunnels or pipelike cavities by water moving through the soil.

Pitting (in tables). Pits caused by melting around ice. They form on the soil after plant cover is removed.

Plastic limit. The moisture content at which a soil changes from semisolid to plastic.

Plasticity index. The numerical difference between the liquid limit and the plastic limit; the range of moisture content within which the soil remains plastic.

Plinthite. The sesquioxide-rich, humus-poor, highly weathered mixture of clay with quartz and other diluents. It commonly appears as red mottles, usually in platy, polygonal, or reticulate patterns. Plinthite changes irreversibly to an ironstone hardpan or to irregular aggregates on repeated wetting and drying, especially if it is exposed also to heat from the sun. In a moist soil, plinthite can be cut with a spade. It is a form of laterite.

Plowpan. A compacted layer formed in the soil directly below the plowed layer.

Ponding. Standing water on soils in closed depressions. Unless the soils are artificially drained, the water can be removed only by percolation or evapotranspiration.

Pore linings. See Redoximorphic features.

Productivity, soil. The capability of a soil for producing a specified plant or sequence of plants under specific management.

Profile, soil. A vertical section of the soil extending through all its horizons and into the parent material.

Reaction, soil. A measure of acidity or alkalinity of a soil, expressed as pH values. A soil that tests to pH 7.0 is described as precisely neutral in reaction because it is neither acid nor alkaline. The degrees of acidity or alkalinity, expressed as pH values, are:

Ultra acid	less than 3.5
Extremely acid	3.5 to 4.4
Very strongly acid	4.5 to 5.0
Strongly acid	5.1 to 5.5
Moderately acid	5.6 to 6.0
Slightly acid	6.1 to 6.5
Neutral	6.6 to 7.3
Slightly alkaline	7.4 to 7.8
Moderately alkaline	7.9 to 8.4
Strongly alkaline	8.5 to 9.0
Very strongly alkaline	9.1 and higher

Redoximorphic concentrations. See Redoximorphic features.

Redoximorphic depletions. See Redoximorphic features.

Redoximorphic features. Redoximorphic features are associated with wetness and result from alternating periods of reduction and oxidation of iron and manganese compounds in the soil. Reduction occurs during saturation with water, and oxidation occurs when the soil is not saturated. Characteristic color patterns are created by these processes. The reduced iron and manganese ions may be removed from a soil if vertical or lateral fluxes of water occur, in which case there is no iron or manganese precipitation in that soil. Wherever the iron and manganese are oxidized and precipitated, they form either soft masses or hard concretions or nodules. Movement of iron and manganese as a result of

redoximorphic processes in a soil may result in redoximorphic features that are defined as follows:

1. Redoximorphic concentrations.—These are zones of apparent accumulation of iron-manganese oxides, including:

   A. Nodules and concretions, which are cemented bodies that can be removed from the soil intact. Concretions are distinguished from nodules on the basis of internal organization. A concretion typically has concentric layers that are visible to the naked eye. Nodules do not have visible organized internal structure; *and*

   B. Masses, which are noncemented concentrations of substances within the soil matrix; *and*

   C. Pore linings, i.e., zones of accumulation along pores that may be either coatings on pore surfaces or impregnations from the matrix adjacent to the pores.

2. Redoximorphic depletions.—These are zones of low chroma (chromas less than those in the matrix) where either iron-manganese oxides alone or both iron-manganese oxides and clay have been stripped out, including:

   A. Iron depletions, i.e., zones that contain low amounts of iron and manganese oxides but have a clay content similar to that of the adjacent matrix; *and*

   B. Clay depletions, i.e., zones that contain low amounts of iron, manganese, and clay (often referred to as silt coatings or skeletans).

3. Reduced matrix.—This is a soil matrix that has low chroma *in situ* but undergoes a change in hue or chroma within 30 minutes after the soil material has been exposed to air.

Reduced matrix. See Redoximorphic features.

Relief. The relative difference in elevation between the upland summits and the lowlands or valleys of a given region.

Rill. A very small, steep-sided channel resulting from erosion and cut in unconsolidated materials by concentrated but intermittent flow of water. A rill generally is not an obstacle to wheeled vehicles and is shallow enough to be smoothed over by ordinary tillage.

Rock fragments. Rock or mineral fragments having a diameter of 2 millimeters or more; for example, pebbles, cobbles, stones, and boulders.

Root zone. The part of the soil that can be penetrated by plant roots.

Runoff. The precipitation discharged into stream channels from an area. The water that flows off the surface of the land without sinking into the soil is called surface runoff. Water that enters the soil before reaching surface streams is called ground-water runoff or seepage flow from ground water.

Sand. As a soil separate, individual rock or mineral fragments from 0.05 millimeter to 2.0 millimeters in diameter. Most sand grains consist of quartz. As a soil textural class, a soil that is 85 percent or more sand and not more than 10 percent clay.

Sapric soil material (muck). The most highly decomposed of all organic soil material. Muck has the least amount of plant fiber, the highest bulk density, and the lowest water content at saturation of all organic soil material.

Saturated hydraulic conductivity (K_{sat}). See Permeability.

Saturation. Wetness characterized by zero or positive pressure of the soil water. Under conditions of saturation, the water will flow from the soil matrix into an unlined auger hole.

Sequum. A sequence consisting of an illuvial horizon and the overlying eluvial horizon. (See Eluviation.)

Series, soil. A group of soils that have profiles that are almost alike, except for

differences in texture of the surface layer. All the soils of a series have horizons that are similar in composition, thickness, and arrangement.

Sheet erosion. The removal of a fairly uniform layer of soil material from the land surface by the action of rainfall and surface runoff.

Shoulder. The convex, erosional surface near the top of a hillslope. A shoulder is a transition from summit to backslope.

Shrink-swell (in tables). The shrinking of soil when dry and the swelling when wet. Shrinking and swelling can damage roads, dams, building foundations, and other structures. It can also damage plant roots.

Side slope (geomorphology). A geomorphic component of hills consisting of a laterally planar area of a hillside. The overland waterflow is predominantly parallel. Side slopes are dominantly colluvium and slope-wash sediments.

Silica. A combination of silicon and oxygen. The mineral form is called quartz.

Silica-sesquioxide ratio. The ratio of the number of molecules of silica to the number of molecules of alumina and iron oxide. The more highly weathered soils or their clay fractions in warm-temperate, humid regions, and especially those in the tropics, generally have a low ratio.

Silt. As a soil separate, individual mineral particles that range in diameter from the upper limit of clay (0.002 millimeter) to the lower limit of very fine sand (0.05 millimeter). As a soil textural class, soil that is 80 percent or more silt and less than 12 percent clay.

Similar soils. Soils that share limits of diagnostic criteria, behave and perform in a similar manner, and have similar conservation needs or management requirements for the major land uses in the survey area.

Sinkhole. A closed, circular or elliptical depression, commonly funnel shaped, characterized by subsurface drainage and formed either by dissolution of the surface of underlying bedrock (e.g., limestone, gypsum, or salt) or by collapse of underlying caves within bedrock. Complexes of sinkholes in carbonate-rock terrain are the main components of karst topography.

Site index. A designation of the quality of a forest site based on the height of the dominant stand at an arbitrarily chosen age. For example, if the average height attained by dominant and codominant trees in a fully stocked stand at the age of 50 years is 75 feet, the site index is 75.

Slope. The inclination of the land surface from the horizontal. Percentage of slope is the vertical distance divided by horizontal distance, then multiplied by 100. Thus, a slope of 20 percent is a drop of 20 feet in 100 feet of horizontal distance. In this survey, classes for simple slopes are as follows:

Nearly level	0 to 2 percent
Gently sloping	2 to 6 percent
Moderately sloping	6 to 10 percent
Strongly sloping	10 to 15 percent

Slow refill (in tables). The slow filling of ponds, resulting from restricted permeability in the soil.

Sodium adsorption ratio (SAR). A measure of the amount of sodium (Na) relative to calcium (Ca) and magnesium (Mg) in the water extract from saturated soil paste. It is the ratio of the Na concentration divided by the square root of one-half of the Ca + Mg concentration.

Soil. A natural, three-dimensional body at the earth's surface. It is capable of supporting plants and has properties resulting from the integrated effect of climate and living matter acting on earthy parent material, as conditioned by relief and by the passage of time.

Soil separates. Mineral particles less than 2 millimeters in equivalent diameter and ranging between specified size limits. The names and sizes, in millimeters, of separates recognized in the United States are as follows:

Very coarse sand	2.0 to 1.0
Coarse sand	1.0 to 0.5
Medium sand	0.5 to 0.25
Fine sand	0.25 to 0.10
Very fine sand	0.10 to 0.05
Silt	0.05 to 0.002
Clay	less than 0.002

Solum. The upper part of a soil profile, above the C horizon, in which the processes of soil formation are active. The solum in soil consists of the A, E, and B horizons. Generally, the characteristics of the material in these horizons are unlike those of the material below the solum. The living roots and plant and animal activities are largely confined to the solum.

Stones. Rock fragments 10 to 24 inches (25 to 60 centimeters) in diameter if rounded or 15 to 24 inches (38 to 60 centimeters) in length if flat.

Stony. Refers to a soil containing stones in numbers that interfere with or prevent tillage.

Stripcropping. Growing crops in a systematic arrangement of strips or bands that provide vegetative barriers to wind erosion and water erosion.

Structure, soil. The arrangement of primary soil particles into compound particles or aggregates. The principal forms of soil structure are—*platy* (laminated), *prismatic* (vertical axis of aggregates longer than horizontal), *columnar* (prisms with rounded tops), *blocky* (angular or subangular), and *granular*. *Structureless* soils are either *single grained* (each grain by itself, as in dune sand) or *massive* (the particles adhering without any regular cleavage, as in many hardpans).

Stubble mulch. Stubble or other crop residue left on the soil or partly worked into the soil. It protects the soil from wind erosion and water erosion after harvest, during preparation of a seedbed for the next crop, and during the early growing period of the new crop.

Subsoil. Technically, the B horizon; roughly, the part of the solum below plow depth.

Subsoiling. Tilling a soil below normal plow depth, ordinarily to shatter a hardpan or claypan.

Substratum. The part of the soil below the solum.

Subsurface layer. Any surface soil horizon (A, E, AB, or EB) below the surface layer.

Surface layer. The soil ordinarily moved in tillage, or its equivalent in uncultivated soil, ranging in depth from 4 to 10 inches (10 to 25 centimeters). Frequently designated as the “plow layer,” or the “Ap horizon.”

Surface soil. The A, E, AB, and EB horizons, considered collectively. It includes all subdivisions of these horizons.

Taxadjuncts. Soils that cannot be classified in a series recognized in the classification system. Such soils are named for a series they strongly resemble and are designated as taxadjuncts to that series because they differ in ways too small to be of consequence in interpreting their use and behavior. Soils are recognized as taxadjuncts only when one or more of their characteristics are slightly outside the range defined for the family of the series for which the soils are named.

Terrace (conservation). An embankment, or ridge, constructed across sloping soils on the contour or at a slight angle to the contour. The terrace intercepts surface runoff so that water soaks into the soil or flows slowly to a prepared outlet. A terrace in a field generally is built so that the field can be farmed. A terrace intended mainly for drainage has a deep channel that is maintained in permanent sod.

Terrace (geomorphology). A steplike surface, bordering a valley floor or shoreline, that represents the former position of a flood plain, lake, or seashore. The term is usually applied both to the relatively flat summit surface (tread) that was cut or built by stream or wave action and to the steeper descending slope (scarp or riser) that has graded to a lower base level of erosion.

Texture, soil. The relative proportions of sand, silt, and clay particles in a mass of soil. The basic textural classes, in order of increasing proportion of fine particles, are *sand, loamy sand, sandy loam, loam, silt loam, silt, sandy clay loam, clay loam, silty clay loam, sandy clay, silty clay,* and *clay*. The sand, loamy sand, and sandy loam classes may be further divided by specifying "coarse," "fine," or "very fine."

Till. Dominantly unsorted and nonstratified drift, generally unconsolidated and deposited directly by a glacier without subsequent reworking by meltwater, and consisting of a heterogeneous mixture of clay, silt, sand, gravel, stones, and boulders; rock fragments of various lithologies are embedded within a finer matrix that can range from clay to sandy loam.

Tilth, soil. The physical condition of the soil as related to tillage, seedbed preparation, seedling emergence, and root penetration.

Toeslope. The gently inclined surface at the base of a hillslope. Toeslopes in profile are commonly gentle and linear and are constructional surfaces forming the lower part of a hillslope continuum that grades to valley or closed-depression floors.

Topsoil. The upper part of the soil, which is the most favorable material for plant growth. It is ordinarily rich in organic matter and is used to topdress roadbanks, lawns, and land affected by mining.

Trace elements. Chemical elements, for example, zinc, cobalt, manganese, copper, and iron, in soils in extremely small amounts. They are essential to plant growth.

Upland. An informal, general term for the higher ground of a region, in contrast with a low-lying adjacent area, such as a valley or plain, or for land at a higher elevation than the flood plain or low stream terrace; land above the footslope zone of the hillslope continuum.

Variegation. Refers to patterns of contrasting colors assumed to be inherited from the parent material rather than to be the result of poor drainage.

Weathering. All physical disintegration, chemical decomposition, and biologically induced changes in rocks or other deposits at or near the earth's surface by atmospheric or biologic agents or by circulating surface waters but involving essentially no transport of the altered material.

Wilting point (or permanent wilting point). The moisture content of soil, on an ovendry basis, at which a plant (specifically a sunflower) wilts so much that it does not recover when placed in a humid, dark chamber.

Windthrow. The uprooting and tipping over of trees by the wind.

Tables

Temperature and Precipitation

(Recorded in the period 1971-2000 at Bishopville, South Carolina)

Month	Temperature: Average daily maximum	Temperature: Average daily minimum	Temperature: Average	Temperature: 2 years in 10 will have-- Maximum temperature higher than--	Temperature: 2 years in 10 will have-- Minimum temperature lower than--	Temperature: Average number of growing degree days*	Precipitation: Average	Precipitation: 2 years in 10 will have-- Less than--	Precipitation: 2 years in 10 will have-- More than--	Precipitation: Average number of days with 0.10 inch or more	Precipitation: Average snowfall
	°F	°F	°F	°F	°F	Units	In	In	In		In
January-----	53.6	31.5	42.5	76	10	40	4.45	2.85	6.09	7	0.3
February----	58.2	33.6	45.9	80	14	66	3.42	1.91	4.81	6	0.9
March-------	66.2	40.5	53.4	85	20	178	4.00	2.29	5.66	6	0.4
April-------	74.7	47.8	61.2	91	28	345	3.01	1.16	4.86	5	0.0
May---------	81.8	57.1	69.5	95	40	601	3.60	1.80	5.19	6	0.0
June--------	88.0	65.2	76.6	100	51	781	4.28	2.39	6.20	7	0.0
July--------	90.8	68.8	79.8	101	59	894	4.88	2.82	6.92	7	0.0
August------	89.0	67.5	78.3	100	57	870	4.36	2.31	6.23	7	0.0
September---	83.9	61.9	72.9	96	45	684	3.90	1.26	6.68	5	0.0
October-----	75.0	49.8	62.4	89	30	391	3.16	1.24	4.89	4	0.0
November----	66.2	40.7	53.4	83	22	169	3.03	1.64	4.30	5	0.0
December----	57.3	34.1	45.7	78	14	68	3.24	1.40	4.99	5	0.2
Yearly:											
Average---	73.7	49.9	61.8	---	---	---	---	---	---	---	---
Extreme---	106	-2	---	102	8	---	---	---	---	---	---
Total-----	---	---	---	---	---	5087	45.31	37.30	50.50	70	1.7

* A growing degree day is a unit of heat available for plant growth. It can be calculated by adding the maximum and minumum daily temperatures, dividing the sum by 2, and subtracting the temperature below which growth is minimal for the principal crops in the area (50 degrees F).

Freeze Dates in Spring and Fall

(Recorded in the period 1971-2000 at Bishopville, SC)

Probability	Temperature 24 °F or lower	Temperature 28 °F or lower	Temperature 32 °F or lower
Last freezing temperature in spring:			
1 year in 10 later than--	Mar. 17	Apr. 5	Apr. 20
2 year in 10 later than--	Mar. 10	Mar. 30	Apr. 13
5 year in 10 later than--	Feb. 26	Mar. 17	Apr. 1
First freezing temperature in fall:			
1 yr in 10 earlier than--	Nov. 10	Oct. 28	Oct. 14
2 yr in 10 earlier than--	Nov. 18	Nov. 3	Oct. 20
5 yr in 10 earlier than--	Dec. 3	Nov. 15	Nov. 1

Growing Season

(Recorded for the period 1971-2000 at Bishopville, SC)

Probability	Daily minimum temperature during growing season: Higher than 24 °F	Higher than 28 °F	Higher than 32 °F
	Days	Days	Days
9 years in 10	256	215	188
8 years in 10	264	224	197
5 years in 10	278	241	213
2 years in 10	292	258	230
1 year in 10	299	267	239

Acreage and Proportionate Extent of the Soils

Map symbol	Soil name	Acres	Percent
AaB	Ailey-Barnwell complex, 0 to 6 percent slopes	4,490	1.7
AcC	Ailey-Troup-Vaucluse complex, 6 to 10 percent slopes	6,195	2.4
AeD	Ailey-Vaucluse-Troup complex, 10 to 15 percent slopes	647	0.2
AgB	Alaga sand, 0 to 4 percent slopes	1,205	0.5
AoB	Alaga-Lucknow complex, 0 to 4 percent slopes, rarely flooded	751	0.3
ApB	Alpin sand, 0 to 6 percent slopes	5,010	1.9
ApD	Alpin sand, 6 to 15 percent slopes	650	0.2
AuB	Autryville sand, 0 to 4 percent slopes	1,408	0.5
BaB	Barnwell loamy coarse sand, 2 to 6 percent slopes	10,732	4.1
BbB2	Barnwell sandy loam, 2 to 6 percent slopes, moderately eroded	243	*
BcC	Barnwell-Cowarts-Troup complex, 6 to 10 percent slopes	2,685	1.0
BoB	Bonneau sand, 0 to 6 percent slopes	2,341	0.9
BuA	Butters coarse sand, 0 to 2 percent slopes	1,576	0.6
CaB	Candor sand, 0 to 6 percent slopes	2,055	0.8
CcA	Chastain-Chewacla complex, 0 to 2 percent slopes, frequently flooded	2,137	0.8
ChA	Chewacla-Chastain complex, 0 to 2 percent slopes, frequently flooded	5,065	1.9
CwD	Cowarts loamy sand, 10 to 15 percent slopes	3,052	1.2
CxA	Coxville sandy loam, 0 to 2 percent slopes	10,167	3.9
DaA	Dorovan silty clay loam, overwash, 0 to 2 percent slopes, frequently flooded	803	0.3
DoA	Dothan loamy sand, 0 to 2 percent slopes	3,005	1.1
DoB	Dothan loamy sand, 2 to 6 percent slopes	7,020	2.7
DtB2	Dothan sandy loam, 2 to 6 percent slopes, moderately eroded	205	*
EuA	Eunola sandy loam, 0 to 2 percent slopes, rarely flooded	3,133	1.2
FaA	Faceville loamy sand, 0 to 2 percent slopes	387	0.1
FaB	Faceville loamy sand, 2 to 6 percent slopes	1,447	0.6
FbB2	Faceville sandy loam, 2 to 6 percent slopes, moderately eroded	86	*
FoB	Foxworth sand, 0 to 4 percent slopes	2,591	1.0
FuB	Fuquay sand, 0 to 6 percent slopes	7,964	3.0
GoA	Goldsboro sandy loam, 0 to 2 percent slopes	29,080	11.1
JhA	Johns loamy sand, 0 to 2 percent slopes, rarely flooded	1,446	0.5
JoA	Johnston muck, 0 to 2 percent slopes, frequently flooded	17,230	6.6
JzA	Johnston-Mouzon complex, 0 to 2 percent slopes, frequently flooded	1,841	0.7
KaA	Kalmia loamy sand, wet substratum, 0 to 2 percent slopes, rarely flooded	572	0.2
LaB	Lakeland sand, 0 to 6 percent slopes	1,933	0.7
LaD	Lakeland sand, 6 to 15 percent slopes	405	0.2
LbB	Lucknow coarse sand, 0 to 4 percent slopes	4,153	1.6
LcB	Lucy sand, 0 to 6 percent slopes	1,201	0.5
LuA	Lumbee sandy loam, 0 to 2 percent slopes, rarely flooded	491	0.2
LyA	Lynchburg sandy loam, 0 to 2 percent slopes	5,364	2.0
MaA	Marvyn sand, 0 to 2 percent slopes	169	*
MaB	Marvyn sand, 2 to 6 percent slopes	858	0.3
MeA	Meggett sandy loam, 0 to 2 percent slopes, occasionally flooded	884	0.3
MyA	Myatt-Paxville complex, 0 to 2 percent slopes, occasionally flooded	1,746	0.7
NaB2	Nankin sandy clay loam, 2 to 6 percent slopes, moderately eroded	693	0.3
NbC	Nankin-Lucy complex, 6 to 10 percent slopes	937	0.4
NbD	Nankin-Lucy complex, 10 to 15 percent slopes	162	*
NeB	Noboco loamy sand, 2 to 6 percent slopes	2,842	1.1
NmB2	Noboco sandy loam, 2 to 6 percent slopes, moderately eroded	262	*
NnA	Noboco-Goldsboro complex, 0 to 2 percent slopes	19,364	7.4
NoA	Norfolk loamy sand, 0 to 2 percent slopes	25,878	9.8
NoB	Norfolk loamy sand, 2 to 6 percent slopes	5,752	2.2
OkA	Okeetee fine sandy loam, 0 to 2 percent slopes, rarely flooded	264	0.1
OrA	Orangeburg loamy sand, 0 to 2 percent slopes	2,659	1.0
OrB	Orangeburg loamy sand, 2 to 6 percent slopes	1,361	0.5
OsB2	Orangeburg sandy loam, 2 to 6 percent slopes, moderately eroded	136	*
PaA	Paxville coarse sandy loam, 0 to 2 percent slopes, occasionally flooded	1,366	0.5
PeA	Pelion loamy sand, 0 to 2 percent slopes	1,298	0.5
PeB	Pelion loamy sand, 2 to 6 percent slopes	1,721	0.7
PtD	Pits-Udorthents, loamy substratum complex, 0 to 15 percent slopes	160	*
RaA	Rains sandy loam, 0 to 2 percent slopes	22,488	8.6
SmA	Smithboro sandy loam, 0 to 2 percent slopes	359	0.1

See footnote at end of table.

Acreage and Proportionate Extent of the Soils—Continued

Map symbol	Soil name	Acres	Percent
StA	State-Eunola complex, 0 to 2 percent slopes, rarely flooded	653	0.2
ThA	Thursa loamy sand, 0 to 2 percent slopes	3,482	1.3
ThB	Thursa loamy sand, 2 to 6 percent slopes	1,412	0.5
TrB	Troup sand, 0 to 6 percent slopes	3,527	1.3
TrC	Troup sand, 6 to 10 percent slopes	1,152	0.4
UdD	Udorthents, refuse substratum-Pits complex, 0 to 15 percent slopes	742	0.3
VaC	Vaucluse loamy sand, 6 to 10 percent slopes	5,737	2.2
W	Water	1,007	0.4
WaB	Wagram sand, 0 to 4 percent slopes	3,163	1.2
	Total	263,000	100.0

* Less than 0.1 percent.

Irrigated and Nonirrigated Yields of Corn, Cotton Lint, Peanuts, Soybeans, and Wheat by Map Unit Component

(Yields in the "N" columns are for nonirrigated areas; those in the "I" columns are for irrigated areas. Yields are those that can be expected under a high level of management. Absence of a yield indicates that the soil is not suited to the crop or the crop generally is not grown on the soil.)

Map symbol and soil name	Land capability		Corn		Cotton lint		Peanuts		Soybeans		Wheat	
	N	I	N	I	N	I	N	I	N	I	N	I
			Bu	Bu	Lbs	Lbs	Lbs	Lbs	Bu	Bu	Bu	Bu
AaB:												
Ailey--------------	3s	---	---	---	400.00	---	---	---	---	---	---	---
Barnwell-----------	2e	---	110.00	---	600.00	---	---	---	35.00	---	---	---
AcC:												
Ailey--------------	4s	---	---	---	350.00	---	---	---	---	---	---	---
Troup--------------	4s	---	---	---	300.00	---	---	---	---	---	---	---
Vaucluse-----------	3e	---	---	---	350.00	---	---	---	---	---	---	---
AeD:												
Ailey--------------	6s	---	---	---	---	---	---	---	---	---	---	---
Vaucluse-----------	4e	---	---	---	---	---	---	---	---	---	---	---
Troup--------------	6s	---	---	---	---	---	---	---	---	---	---	---
AgB:												
Alaga--------------	3s	---	---	---	350.00	---	---	---	---	---	---	---
AoB:												
Alaga--------------	3s	---	---	---	350.00	---	---	---	---	---	---	---
Lucknow------------	3s	---	---	---	350.00	---	---	---	---	---	---	---
ApB:												
Alpin--------------	4s	---	---	---	300.00	---	---	---	---	---	---	---
ApD:												
Alpin--------------	7s	---	---	---	---	---	---	---	---	---	---	---
AuB:												
Autryville---------	2s	---	---	---	550.00	---	---	---	---	---	---	---
BaB:												
Barnwell-----------	2e	---	110.00	---	600.00	---	4,000.00	---	35.00	---	55.00	---
BbB2:												
Barnwell-----------	3e	---	90.00	---	550.00	---	3,500.00	---	30.00	---	55.00	---

Irrigated and Nonirrigated Yields of Corn, Cotton Lint, Peanuts, Soybeans, and Wheat by Map Unit Component—Continued

Map symbol and soil name	Land capability		Corn		Cotton lint		Peanuts		Soybeans		Wheat	
	N	I	N	I	N	I	N	I	N	I	N	I
			Bu	Bu	Lbs	Lbs	Lbs	Lbs	Bu	Bu	Bu	Bu
BcC:												
Barnwell	3e	---	90.00	---	550.00	---	---	---	35.00	---	---	---
Cowarts	4e	---	---	---	400.00	---	---	---	---	---	---	---
Troup	4s	---	---	---	300.00	---	---	---	---	---	---	---
BoB:												
Bonneau	2s	---	---	---	650.00	---	---	---	---	---	---	---
BuA:												
Butters	2s	---	---	---	550.00	---	---	---	---	---	---	---
CaB:												
Candor	3s	---	---	115.00	350.00	---	---	---	---	35.00	---	---
CcA:												
Chastain	7w	---	---	---	---	---	---	---	---	---	---	---
Chewacla	4w	---	---	---	---	---	---	---	---	---	---	---
ChA:												
Chewacla	4w	---	---	---	400.00	---	---	---	---	---	---	---
Chastain	7w	---	---	---	---	---	---	---	---	---	---	---
CwD:												
Cowarts	4e	---	---	---	350.00	---	---	---	---	---	---	---
CxA:												
Coxville	3w	---	110.00	---	450.00	---	---	---	40.00	---	50.00	---
DaA:												
Dorovan	7w	---	---	---	---	---	---	---	---	---	---	---
DoA:												
Dothan	1	---	110.00	---	700.00	---	4,000.00	---	35.00	---	55.00	---
DoB:												
Dothan	2e	---	110.00	---	700.00	---	4,000.00	---	35.00	---	55.00	---
DtB2:												
Dothan	3e	---	90.00	---	600.00	---	2,500.00	---	30.00	---	---	---
EuA:												
Eunola	2w	---	110.00	---	700.00	---	---	---	35.00	---	55.00	---

Irrigated and Nonirrigated Yields of Corn, Cotton Lint, Peanuts, Soybeans, and Wheat by Map Unit Component—Continued

Map symbol and soil name	Land capability		Corn		Cotton lint		Peanuts		Soybeans		Wheat	
	N	I	N	I	N	I	N	I	N	I	N	I
			Bu	Bu	Lbs	Lbs	Lbs	Lbs	Bu	Bu	Bu	Bu
FaA:												
Faceville----------	1	---	110.00	---	800.00	---	4,000.00	---	35.00	---	55.00	---
FaB:												
Faceville----------	2e	---	110.00	---	800.00	---	4,000.00	---	35.00	---	55.00	---
FbB2:												
Faceville----------	3e	---	90.00	---	600.00	---	3,500.00	---	30.00	---	55.00	---
FoB:												
Foxworth-----------	3s	---	---	---	350.00	---	---	---	---	---	---	---
FuB:												
Fuquay-------------	2s	---	---	---	550.00	---	---	---	---	---	---	---
GoA:												
Goldsboro----------	2w	---	110.00	---	700.00	---	2,600.00	---	35.00	---	55.00	---
JhA:												
Johns--------------	2w	---	110.00	---	650.00	---	---	---	35.00	---	55.00	---
JoA:												
Johnston-----------	7w	---	---	---	---	---	---	---	---	---	---	---
JzA:												
Johnston-----------	7w	---	---	---	---	---	---	---	---	---	---	---
Mouzon-------------	6w	---	---	---	---	---	---	---	---	---	---	---
KaA:												
Kalmia-------------	1	---	110.00	---	750.00	---	4,000.00	---	35.00	---	55.00	---
LaB:												
Lakeland-----------	4s	---	---	---	300.00	---	---	---	---	---	---	---
LaD:												
Lakeland-----------	7s	---	---	---	---	---	---	---	---	---	---	---
LbB:												
Lucknow------------	3s	---	---	---	350.00	---	---	---	---	---	---	---
LcB:												
Lucy---------------	2s	---	---	---	600.00	---	---	---	---	---	---	---
LuA:												
Lumbee-------------	3w	---	110.00	---	450.00	---	---	---	35.00	---	---	---

Irrigated and Nonirrigated Yields of Corn, Cotton Lint, Peanuts, Soybeans, and Wheat by Map Unit Component—Continued

Map symbol and soil name	Land capability		Corn		Cotton lint		Peanuts		Soybeans		Wheat	
	N	I	N	I	N	I	N	I	N	I	N	I
			Bu	Bu	Lbs	Lbs	Lbs	Lbs	Bu	Bu	Bu	Bu
LyA:												
Lynchburg----------	2w	---	115.00	---	675.00	---	---	---	35.00	---	55.00	---
MaA:												
Marvyn-------------	1	---	110.00	---	700.00	---	---	---	35.00	---	55.00	---
MaB:												
Marvyn-------------	2e	---	110.00	---	700.00	---	---	---	35.00	---	55.00	---
MeA:												
Meggett------------	6w	---	---	---	---	---	---	---	---	---	---	---
MyA:												
Myatt--------------	4w	---	---	---	450.00	---	---	---	---	---	---	---
Paxville-----------	6w	---	---	---	---	---	---	---	---	---	---	---
NaB2:												
Nankin-------------	3e	---	90.00	---	550.00	---	3,500.00	---	30.00	---	55.00	---
NbC:												
Nankin-------------	3e	---	---	---	400.00	---	---	---	---	---	---	---
Lucy---------------	3s	---	---	---	550.00	---	---	---	---	---	---	---
NbD:												
Nankin-------------	4e	---	---	---	400.00	---	---	---	---	---	---	---
Lucy---------------	4s	---	---	---	550.00	---	---	---	---	---	---	---
NeB:												
Noboco-------------	2e	---	110.00	---	700.00	---	4,000.00	---	35.00	---	55.00	---
NmB2:												
Noboco-------------	3e	---	90.00	---	600.00	---	3,500.00	---	30.00	---	55.00	---
NnA:												
Noboco-------------	1	---	110.00	---	700.00	---	4,000.00	---	35.00	---	55.00	---
Goldsboro----------	2w	---	110.00	---	700.00	---	2,600.00	---	30.00	---	55.00	---
NoA:												
Norfolk------------	1	---	110.00	---	700.00	---	4,000.00	---	35.00	---	55.00	---
NoB:												
Norfolk------------	2e	---	110.00	---	700.00	---	4,000.00	---	35.00	---	55.00	---

Irrigated and Nonirrigated Yields of Corn, Cotton Lint, Peanuts, Soybeans, and Wheat by Map Unit Component—Continued

Map symbol and soil name	Land capability		Corn		Cotton lint		Peanuts		Soybeans		Wheat	
	N	I	N	I	N	I	N	I	N	I	N	I
			Bu	Bu	Lbs	Lbs	Lbs	Lbs	Bu	Bu	Bu	Bu
OkA:												
Okeetee	3w	---	---	---	450.00	---	---	---	---	---	---	---
OrA:												
Orangeburg	1	---	110.00	---	800.00	---	4,000.00	---	35.00	---	55.00	---
OrB:												
Orangeburg	2e	---	110.00	---	800.00	---	4,000.00	---	35.00	---	55.00	---
OsB2:												
Orangeburg	3e	---	90.00	---	600.00	---	3,500.00	---	30.00	---	55.00	---
PaA:												
Paxville	6w	---	---	---	---	---	---	---	---	---	---	---
PeA:												
Pelion	2w	---	---	---	550.00	---	---	---	---	---	---	---
PeB:												
Pelion	2e	---	---	---	500.00	---	---	---	---	---	---	---
PtD:												
Pits	8	---	---	---	---	---	---	---	---	---	---	---
Udorthents	8	---	---	---	---	---	---	---	---	---	---	---
RaA:												
Rains	3w	---	110.00	---	450.00	---	---	---	35.00	---	---	---
SmA:												
Smithboro	3w	---	80.00	---	450.00	---	---	---	22.00	---	---	---
StA:												
State	1	---	110.00	---	700.00	---	4,000.00	---	35.00	---	55.00	---
Eunola	2w	---	110.00	---	650.00	---	---	---	35.00	---	55.00	---
ThA:												
Thursa	1	---	110.00	---	700.00	---	4,000.00	---	35.00	---	55.00	---
ThB:												
Thursa	2e	---	110.00	---	700.00	---	4,000.00	---	35.00	---	55.00	---
TrB:												
Troup	3s	---	---	---	350.00	---	---	---	---	---	---	---

Irrigated and Nonirrigated Yields of Corn, Cotton Lint, Peanuts, Soybeans, and Wheat by Map Unit Component—Continued

Map symbol and soil name	Land capability		Corn		Cotton lint		Peanuts		Soybeans		Wheat	
	N	I	N	I	N	I	N	I	N	I	N	I
			Bu	Bu	Lbs	Lbs	Lbs	Lbs	Bu	Bu	Bu	Bu
TrC:												
Troup	4s	---	---	---	300.00	---	---	---	---	---	---	---
UdD:												
Udorthents, refuse substratum	8	---	---	---	---	---	---	---	---	---	---	---
Pits	8	---	---	---	---	---	---	---	---	---	---	---
VaC:												
Vaucluse	3e	---	---	---	400.00	---	---	---	---	---	---	---
WaB:												
Wagram	2s	---	75.00	---	550.00	---	---	---	---	---	---	---

Irrigated and Nonirrigated Yields of Bahiagrass and Improved Bermudagrass by Map Unit Component

(Yields in the "N" columns are for nonirrigated areas; those in the "I" columns are for irrigated areas. Yields are those that can be expected under a high level of management. Absence of a yield indicates that the soil is not suited to the crop or the crop generally is not grown on the soil.)

Map symbol and soil name	Land capability		Bahiagrass		Improved bermudagrass	
	N	I	N	I	N	I
			AUM	AUM	AUM	AUM
AaB:						
Ailey	3s	---	6.00	---	6.00	---
Barnwell	2e	---	7.00	---	8.00	---
AcC:						
Ailey	4s	---	5.00	---	5.00	---
Troup	4s	---	7.20	---	7.50	---
Vaucluse	3e	---	7.00	---	8.00	---
AeD:						
Ailey	6s	---	5.00	---	5.00	---
Vaucluse	4e	---	7.00	---	8.00	---
Troup	6s	---	7.20	---	7.50	---
AgB:						
Alaga	3s	---	7.00	---	7.50	---
AoB:						
Alaga	3s	---	7.00	---	7.50	---
Lucknow	3s	---	6.50	---	8.00	---
ApB:						
Alpin	4s	---	7.00	---	8.00	---
ApD:						
Alpin	7s	---	6.50	---	7.50	---
AuB:						
Autryville	2s	---	8.00	---	9.00	---
BaB:						
Barnwell	2e	---	7.00	---	8.00	---
BbB2:						
Barnwell	3e	---	7.00	---	8.00	---
BcC:						
Barnwell	3e	---	6.00	---	7.00	---
Cowarts	4e	---	---	---	7.00	---
Troup	4s	---	7.00	---	7.30	---
BoB:						
Bonneau	2s	---	8.00	---	8.50	---
BuA:						
Butters	2s	---	---	---	10.00	---

Irrigated and Nonirrigated Yields of Bahiagrass and Improved Bermudagrass by Map Unit Component—Continued

Map symbol and soil name	Land capability N	Land capability I	Bahiagrass N	Bahiagrass I	Improved bermudagrass N	Improved bermudagrass I
			AUM	AUM	AUM	AUM
CaB:						
Candor	3s	---	---	---	---	---
CcA:						
Chastain	7w	---	---	---	---	---
Chewacla	4w	---	---	---	---	---
ChA:						
Chewacla	4w	---	---	---	---	---
Chastain	7w	---	---	---	---	---
CwD:						
Cowarts	4e	---	---	---	7.00	---
CxA:						
Coxville	3w	---	---	---	---	---
DaA:						
Dorovan	7w	---	---	---	---	---
DoA:						
Dothan	1	---	9.00	---	---	---
DoB:						
Dothan	2e	---	9.00	---	---	---
DtB2:						
Dothan	3e	---	9.00	---	---	---
EuA:						
Eunola	2w	---	---	---	---	---
FaA:						
Faceville	1	---	7.00	---	10.00	---
FaB:						
Faceville	2e	---	7.00	---	10.00	---
FbB2:						
Faceville	3e	---	6.00	---	8.00	---
FoB:						
Foxworth	3s	---	7.50	---	---	---
FuB:						
Fuquay	2s	---	---	---	---	---
GoA:						
Goldsboro	2w	---	---	---	---	---
JhA:						
Johns	2w	---	---	---	---	---
JoA:						
Johnston	7w	---	---	---	---	---
JzA:						
Johnston	7w	---	---	---	---	---

Irrigated and Nonirrigated Yields of Bahiagrass and Improved Bermudagrass by Map Unit Component—Continued

Map symbol and soil name	Land capability		Bahiagrass		Improved bermudagrass	
	N	I	N	I	N	I
			AUM	AUM	AUM	AUM
Mouzon------------------	6w	---	---	---	---	---
KaA:						
Kalmia------------------	1	---	---	---	---	---
LaB:						
Lakeland----------------	4s	---	7.00	---	7.00	---
LaD:						
Lakeland----------------	7s	---	6.50	---	6.50	---
LbB:						
Lucknow-----------------	3s	---	6.50	---	8.00	---
LcB:						
Lucy--------------------	2s	---	8.50	---	8.00	---
LuA:						
Lumbee------------------	3w	---	---	---	---	---
LyA:						
Lynchburg---------------	2w	---	10.00	---	---	---
MaA:						
Marvyn------------------	1	---	6.00	---	7.00	---
MaB:						
Marvyn------------------	2e	---	6.00	---	7.00	---
MeA:						
Meggett-----------------	6w	---	---	---	---	---
MyA:						
Myatt-------------------	4w	---	6.00	---	---	---
Paxville----------------	6w	---	---	---	---	---
NaB2:						
Nankin------------------	3e	---	6.00	---	7.00	---
NbC:						
Nankin------------------	3e	---	6.00	---	7.00	---
Lucy--------------------	3s	---	8.50	---	8.00	---
NbD:						
Nankin------------------	4e	---	6.00	---	7.00	---
Lucy--------------------	4s	---	8.50	---	8.00	---
NeB:						
Noboco------------------	2e	---	---	---	---	---
NmB2:						
Noboco------------------	3e	---	---	---	---	---
NnA:						
Noboco------------------	1	---	---	---	---	---
Goldsboro---------------	2w	---	---	---	---	---

Irrigated and Nonirrigated Yields of Bahiagrass and Improved Bermudagrass by Map Unit Component—Continued

Map symbol and soil name	Land capability N	Land capability I	Bahiagrass N	Bahiagrass I	Improved bermudagrass N	Improved bermudagrass I
			AUM	AUM	AUM	AUM
NoA:						
Norfolk	1	---	---	---	---	---
NoB:						
Norfolk	2e	---	---	---	---	---
OkA:						
Okeetee	3w	---	8.50	---	8.50	---
OrA:						
Orangeburg	1	---	8.50	---	10.50	---
OrB:						
Orangeburg	2e	---	8.50	---	10.50	---
OsB2:						
Orangeburg	3e	---	8.50	---	10.50	---
PaA:						
Paxville	6w	---	---	---	---	---
PeA:						
Pelion	2w	---	8.00	---	8.00	---
PeB:						
Pelion	2e	---	7.00	---	8.00	---
PtD:						
Pits	8	---	---	---	---	---
Udorthents	8	---	---	---	---	---
RaA:						
Rains	3w	---	10.00	---	---	---
SmA:						
Smithboro	3w	---	9.00	---	---	---
StA:						
State	1	---	---	---	---	---
Eunola	2w	---	---	---	---	---
ThA:						
Thursa	1	---	8.50	---	10.50	---
ThB:						
Thursa	2e	---	8.50	---	10.50	---
TrB:						
Troup	3s	---	7.20	---	7.50	---
TrC:						
Troup	4s	---	7.00	---	7.30	---
UdD:						
Udorthents, refuse substratum	8	---	---	---	---	---
Pits	8	---	---	---	---	---

Irrigated and Nonirrigated Yields of Bahiagrass and Improved Bermudagrass by Map Unit Component—Continued

Map symbol and soil name	Land capability		Bahiagrass		Improved bermudagrass	
	N	I	N	I	N	I
			AUM	AUM	AUM	AUM
VaC:						
Vaucluse-----------------	3e	---	7.00	---	8.00	---
WaB:						
Wagram------------------	2s	---	---	---	---	---

Prime Farmland and Other Important Farmlands

(Only the soils considered prime or important farmland are listed. Urban or built-up areas of the soils listed are not considered prime or important farmland. If a soil is prime or important farmland only under certain conditions, the conditions are specified in parentheses after the soil name.)

Map symbol	Map unit name	Farmland Classification
DoA	Dothan loamy sand, 0 to 2 percent slopes	Prime farmland in all areas
DoB	Dothan loamy sand, 2 to 6 percent slopes	Prime farmland in all areas
EuA	Eunola sandy loam, 0 to 2 percent slopes, rarely flooded	Prime farmland in all areas
FaA	Faceville loamy sand, 0 to 2 percent slopes	Prime farmland in all areas
FaB	Faceville loamy sand, 2 to 6 percent slopes	Prime farmland in all areas
GoA	Goldsboro sandy loam, 0 to 2 percent slopes	Prime farmland in all areas
JhA	Johns loamy sand, 0 to 2 percent slopes, rarely flooded	Prime farmland in all areas
KaA	Kalmia loamy sand, wet substratum, 0 to 2 percent slopes, rarely flooded	Prime farmland in all areas
MaA	Marvyn sand, 0 to 2 percent slopes	Prime farmland in all areas
MaB	Marvyn sand, 2 to 6 percent slopes	Prime farmland in all areas
NeB	Noboco loamy sand, 2 to 6 percent slopes	Prime farmland in all areas
NnA	Noboco-Goldsboro complex, 0 to 2 percent slopes	Prime farmland in all areas
NoA	Norfolk loamy sand, 0 to 2 percent slopes	Prime farmland in all areas
NoB	Norfolk loamy sand, 2 to 6 percent slopes	Prime farmland in all areas
OrA	Orangeburg loamy sand, 0 to 2 percent slopes	Prime farmland in all areas
OrB	Orangeburg loamy sand, 2 to 6 percent slopes	Prime farmland in all areas
StA	State-Eunola complex, 0 to 2 percent slopes, rarely flooded	Prime farmland in all areas
ThA	Thursa loamy sand, 0 to 2 percent slopes	Prime farmland in all areas
ThB	Thursa loamy sand, 2 to 6 percent slopes	Prime farmland in all areas
AaB	Ailey-Barnwell complex, 0 to 6 percent slopes	Farmland of statewide importance
AuB	Autryville sand, 0 to 4 percent slopes	Farmland of statewide importance
BaB	Barnwell loamy coarse sand, 2 to 6 percent slopes	Farmland of statewide importance
BbB2	Barnwell sandy loam, 2 to 6 percent slopes, moderately eroded	Farmland of statewide importance
BoB	Bonneau sand, 0 to 6 percent slopes	Farmland of statewide importance
BuA	Butters coarse sand, 0 to 2 percent slopes	Farmland of statewide importance
CaB	Candor sand, 0 to 6 percent slopes	Farmland of statewide importance
ChA	Chewacla-Chastain complex, 0 to 2 percent slopes, frequently flooded	Farmland of statewide importance
CxA	Coxville sandy loam, 0 to 2 percent slopes	Farmland of statewide importance
DtB2	Dothan sandy loam, 2 to 6 percent slopes, moderately eroded	Farmland of statewide importance
FbB2	Faceville sandy loam, 2 to 6 percent slopes, moderately eroded	Farmland of statewide importance
FuB	Fuquay sand, 0 to 6 percent slopes	Farmland of statewide importance
LcB	Lucy sand, 0 to 6 percent slopes	Farmland of statewide importance
LuA	Lumbee sandy loam, 0 to 2 percent slopes, rarely flooded	Farmland of statewide importance
LyA	Lynchburg sandy loam, 0 to 2 percent slopes	Farmland of statewide importance
MeA	Meggett sandy loam, 0 to 2 percent slopes, occasionally flooded	Farmland of statewide importance
MyA	Myatt-Paxville complex, 0 to 2 percent slopes, occasionally flooded	Farmland of statewide importance
NaB2	Nankin sandy clay loam, 2 to 6 percent slopes, moderately eroded	Farmland of statewide importance
NbC	Nankin-Lucy complex, 6 to 10 percent slopes	Farmland of statewide importance
NmB2	Noboco sandy loam, 2 to 6 percent slopes, moderately eroded	Farmland of statewide importance
OkA	Okeetee fine sandy loam, 0 to 2 percent slopes, rarely flooded	Farmland of statewide importance
OsB2	Orangeburg sandy loam, 2 to 6 percent slopes, moderately eroded	Farmland of statewide importance
PaA	Paxville coarse sandy loam, 0 to 2 percent slopes, occasionally flooded	Farmland of statewide importance
PeA	Pelion loamy sand, 0 to 2 percent slopes	Farmland of statewide importance
PeB	Pelion loamy sand, 2 to 6 percent slopes	Farmland of statewide importance
RaA	Rains sandy loam, 0 to 2 percent slopes	Farmland of statewide importance
SmA	Smithboro sandy loam, 0 to 2 percent slopes	Farmland of statewide importance
WaB	Wagram sand, 0 to 4 percent slopes	Farmland of statewide importance

Agricultural Disposal of Manure, Food-Processing Waste, and Sewage Sludge

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. See text for further explanation of ratings in this table.)

Map symbol and soil name	Application of manure and food-processing waste		Application of sewage sludge	
	Rating class and limiting features	Value	Rating class and limiting features	Value
AaB:				
Ailey---------------	Very limited		Very limited	
	Droughty	1.00	Droughty	1.00
	Filtering capacity	0.99	Filtering capacity	0.99
	Too acid	0.22	Too acid	0.77
Barnwell------------	Very limited		Very limited	
	Filtering capacity	0.99	Filtering capacity	0.99
	Low adsorption	0.99	Too acid	0.96
	Too acid	0.37	Low adsorption	0.38
AcC:				
Ailey---------------	Very limited		Very limited	
	Droughty	1.00	Droughty	1.00
	Filtering capacity	0.99	Filtering capacity	0.99
	Low adsorption	0.84	Low adsorption	0.82
Troup---------------	Very limited		Very limited	
	Filtering capacity	0.99	Filtering capacity	0.99
	Leaching	0.45	Too acid	0.91
	Too acid	0.32	Slope	0.01
Vaucluse------------	Very limited		Very limited	
	Droughty	1.00	Droughty	1.00
	Dense layer	1.00	Too acid	1.00
	Filtering capacity	0.99	Filtering capacity	0.99
AeD:				
Ailey---------------	Very limited		Very limited	
	Droughty	1.00	Droughty	1.00
	Filtering capacity	0.99	Filtering capacity	0.99
	Low adsorption	0.84	Low adsorption	0.82
Vaucluse------------	Very limited		Very limited	
	Droughty	1.00	Droughty	1.00
	Dense layer	1.00	Too acid	1.00
	Filtering capacity	0.99	Filtering capacity	0.99
Troup---------------	Very limited		Very limited	
	Filtering capacity	0.99	Filtering capacity	0.99
	Slope	0.63	Too acid	0.91
	Leaching	0.45	Slope	0.63

Agricultural Disposal of Manure, Food-Processing Waste, and Sewage Sludge—Continued

Map symbol and soil name	Application of manure and food-processing waste: Rating class and limiting features	Value	Application of sewage sludge: Rating class and limiting features	Value
AgB:				
Alaga	Very limited		Very limited	
	Filtering capacity	0.99	Filtering capacity	0.99
	Leaching	0.45	Too acid	0.99
	Too acid	0.43	Droughty	0.34
AoB:				
Alaga	Very limited		Very limited	
	Filtering capacity	0.99	Filtering capacity	0.99
	Leaching	0.45	Flooding	0.40
	Too acid	0.05	Too acid	0.21
Lucknow	Very limited		Very limited	
	Filtering capacity	0.99	Too acid	1.00
	Too acid	0.56	Filtering capacity	0.99
	Leaching	0.45	Flooding	0.40
ApB:				
Alpin	Very limited		Very limited	
	Filtering capacity	0.99	Filtering capacity	0.99
	Droughty	0.89	Too acid	0.99
	Low adsorption	0.61	Droughty	0.89
ApD:				
Alpin	Very limited		Very limited	
	Filtering capacity	0.99	Filtering capacity	0.99
	Droughty	0.90	Too acid	0.99
	Too acid	0.50	Droughty	0.90
AuB:				
Autryville	Very limited		Very limited	
	Filtering capacity	0.99	Filtering capacity	0.99
	Leaching	0.45	Too acid	0.91
	Too acid	0.32		
BaB:				
Barnwell	Very limited		Very limited	
	Filtering capacity	0.99	Filtering capacity	0.99
	Low adsorption	0.99	Too acid	0.96
	Too acid	0.37	Low adsorption	0.27
BbB2:				
Barnwell	Very limited		Somewhat limited	
	Low adsorption	1.00	Too acid	0.96
	Too acid	0.37	Low adsorption	0.96
	Slow water movement	0.30	Slow water movement	0.22

Agricultural Disposal of Manure, Food-Processing Waste, and Sewage Sludge—Continued

Map symbol and soil name	Application of manure and food-processing waste		Application of sewage sludge	
	Rating class and limiting features	Value	Rating class and limiting features	Value
BcC:				
Barnwell------------	Very limited		Very limited	
	Filtering capacity	0.99	Filtering capacity	0.99
	Low adsorption	0.99	Too acid	0.96
	Too acid	0.37	Low adsorption	0.38
Cowarts-------------	Very limited		Very limited	
	Filtering capacity	0.99	Filtering capacity	0.99
	Droughty	0.77	Too acid	0.99
	Too acid	0.43	Droughty	0.77
Troup---------------	Very limited		Very limited	
	Filtering capacity	0.99	Filtering capacity	0.99
	Leaching	0.45	Too acid	0.91
	Too acid	0.32	Slope	0.01
BoB:				
Bonneau-------------	Very limited		Very limited	
	Filtering capacity	0.99	Filtering capacity	0.99
	Leaching	0.45	Too acid	0.07
	Too acid	0.02	Depth to saturated zone	0.01
BuA:				
Butters-------------	Very limited		Very limited	
	Filtering capacity	0.99	Filtering capacity	0.99
	Too acid	0.43	Too acid	0.99
	Low adsorption	0.13		
CaB:				
Candor--------------	Very limited		Very limited	
	Filtering capacity	0.99	Filtering capacity	0.99
	Leaching	0.45	Too acid	0.99
	Too acid	0.43	Droughty	0.01
CcA:				
Chastain------------	Very limited		Very limited	
	Slow water movement	1.00	Depth to saturated zone	1.00
	Depth to saturated zone	1.00	Flooding	1.00
	Flooding	1.00	Slow water movement	1.00
Chewacla------------	Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Flooding	1.00	Flooding	1.00
	Too acid	0.50	Too acid	0.99

Agricultural Disposal of Manure, Food-Processing Waste, and Sewage Sludge—Continued

Map symbol and soil name	Application of manure and food-processing waste: Rating class and limiting features	Value	Application of sewage sludge: Rating class and limiting features	Value
ChA:				
Chewacla------------	Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Flooding	1.00	Flooding	1.00
	Too acid	0.50	Too acid	0.99
Chastain------------	Very limited		Very limited	
	Slow water movement	1.00	Depth to saturated zone	1.00
	Depth to saturated zone	1.00	Flooding	1.00
	Flooding	1.00	Slow water movement	1.00
CwD:				
Cowarts-------------	Very limited		Very limited	
	Filtering capacity	0.99	Filtering capacity	0.99
	Droughty	0.77	Too acid	0.99
	Slope	0.63	Droughty	0.77
CxA:				
Coxville------------	Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Runoff	0.40	Slow water movement	0.22
	Low adsorption	0.39	Too acid	0.07
DaA:				
Dorovan-------------	Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Flooding	1.00	Flooding	1.00
	Too acid	0.68	Low adsorption	1.00
DoA:				
Dothan--------------	Very limited		Very limited	
	Filtering capacity	0.99	Filtering capacity	0.99
	Low adsorption	0.88	Too acid	0.55
	Droughty	0.25	Low adsorption	0.53
DoB:				
Dothan--------------	Very limited		Very limited	
	Filtering capacity	0.99	Filtering capacity	0.99
	Low adsorption	0.66	Too acid	0.55
	Droughty	0.29	Droughty	0.29
DtB2:				
Dothan--------------	Somewhat limited		Somewhat limited	
	Low adsorption	0.89	Low adsorption	0.72
	Droughty	0.15	Too acid	0.55
	Too acid	0.14	Droughty	0.15

Agricultural Disposal of Manure, Food-Processing Waste, and Sewage Sludge—Continued

Map symbol and soil name	Application of manure and food-processing waste: Rating class and limiting features	Value	Application of sewage sludge: Rating class and limiting features	Value
EuA:				
Eunola	Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Too acid	0.37	Too acid	0.96
	Low adsorption	0.04	Flooding	0.40
FaA, FaB:				
Faceville	Very limited		Very limited	
	Filtering capacity	0.99	Filtering capacity	0.99
	Low adsorption	0.96	Too acid	0.31
	Too acid	0.08	Low adsorption	0.08
FbB2:				
Faceville	Very limited		Very limited	
	Low adsorption	1.00	Low adsorption	1.00
	Too acid	0.08	Too acid	0.31
FoB:				
Foxworth	Very limited		Very limited	
	Filtering capacity	0.99	Too acid	1.00
	Droughty	0.75	Filtering capacity	0.99
	Too acid	0.62	Droughty	0.75
FuB:				
Fuquay	Very limited		Very limited	
	Filtering capacity	0.99	Too acid	1.00
	Low adsorption	0.99	Filtering capacity	0.99
	Droughty	0.93	Droughty	0.93
GoA:				
Goldsboro	Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Too acid	0.62	Too acid	1.00
	Low adsorption	0.40		
JhA:				
Johns	Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Filtering capacity	0.99	Filtering capacity	0.99
	Strongly contrasting textural stratification	0.06	Flooding	0.40
JoA:				
Johnston	Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Flooding	1.00	Flooding	1.00
	Filtering capacity	0.99	Too acid	1.00

Agricultural Disposal of Manure, Food-Processing Waste, and Sewage Sludge—Continued

Map symbol and soil name	Application of manure and food-processing waste		Application of sewage sludge	
	Rating class and limiting features	Value	Rating class and limiting features	Value
JzA:				
Johnston	Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Flooding	1.00	Flooding	1.00
	Filtering capacity	0.99	Too acid	1.00
Mouzon	Very limited		Very limited	
	Slow water movement	1.00	Depth to saturated zone	1.00
	Depth to saturated zone	1.00	Flooding	1.00
	Flooding	1.00	Slow water movement	1.00
KaA:				
Kalmia	Very limited		Very limited	
	Filtering capacity	0.99	Filtering capacity	0.99
	Strongly contrasting textural stratification	0.71	Strongly contrasting textural stratification	0.71
	Low adsorption	0.23	Flooding	0.40
LaB, LaD:				
Lakeland	Very limited		Very limited	
	Filtering capacity	0.99	Filtering capacity	0.99
	Droughty	0.99	Too acid	0.99
	Too acid	0.50	Droughty	0.99
LbB:				
Lucknow	Very limited		Very limited	
	Filtering capacity	0.99	Too acid	1.00
	Too acid	0.56	Filtering capacity	0.99
	Leaching	0.45		
LcB:				
Lucy	Very limited		Very limited	
	Filtering capacity	0.99	Filtering capacity	0.99
	Leaching	0.45	Too acid	0.77
	Too acid	0.22		
LuA:				
Lumbee	Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Filtering capacity	0.99	Filtering capacity	0.99
	Leaching	0.70	Too acid	0.67

Agricultural Disposal of Manure, Food-Processing Waste, and Sewage Sludge—Continued

Map symbol and soil name	Application of manure and food-processing waste		Application of sewage sludge	
	Rating class and limiting features	Value	Rating class and limiting features	Value
LyA:				
Lynchburg-----------	Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Too acid	0.37	Too acid	0.96
	Low adsorption	0.11		
MaA:				
Marvyn--------------	Very limited		Very limited	
	Dense layer	1.00	Filtering capacity	0.99
	Filtering capacity	0.99	Too acid	0.67
	Low adsorption	0.28		
MaB:				
Marvyn--------------	Very limited		Very limited	
	Dense layer	1.00	Filtering capacity	0.99
	Filtering capacity	0.99	Too acid	0.67
	Low adsorption	0.53	Low adsorption	0.26
MeA:				
Meggett-------------	Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Slow water movement	1.00	Flooding	1.00
	Flooding	0.60	Slow water movement	1.00
MyA:				
Myatt---------------	Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Too acid	0.98	Flooding	1.00
	Flooding	0.60	Too acid	1.00
Paxville------------	Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Filtering capacity	0.99	Flooding	1.00
	Too acid	0.92	Too acid	1.00
NaB2:				
Nankin--------------	Somewhat limited		Somewhat limited	
	Low adsorption	0.99	Low adsorption	0.88
	Slow water movement	0.89	Slow water movement	0.78
	Too acid	0.18	Too acid	0.67
NbC:				
Nankin--------------	Very limited		Very limited	
	Filtering capacity	0.99	Filtering capacity	0.99
	Slow water movement	0.30	Too acid	0.85
	Too acid	0.27	Slow water movement	0.22

Agricultural Disposal of Manure, Food-Processing Waste, and Sewage Sludge—Continued

Map symbol and soil name	Application of manure and food-processing waste: Rating class and limiting features	Value	Application of sewage sludge: Rating class and limiting features	Value
Lucy----------------	Very limited		Very limited	
	Filtering capacity	0.99	Filtering capacity	0.99
	Leaching	0.45	Too acid	0.77
	Too acid	0.22	Slope	0.01
NbD:				
Nankin--------------	Somewhat limited		Very limited	
	Too acid	0.50	Too acid	0.99
	Slope	0.37	Slope	0.37
	Slow water movement	0.30	Slow water movement	0.22
Lucy----------------	Very limited		Very limited	
	Filtering capacity	0.99	Filtering capacity	0.99
	Leaching	0.45	Too acid	0.77
	Slope	0.37	Slope	0.37
NeB:				
Noboco--------------	Very limited		Very limited	
	Filtering capacity	0.99	Filtering capacity	0.99
	Depth to saturated zone	0.32	Too acid	0.55
	Too acid	0.14	Depth to saturated zone	0.32
NmB2:				
Noboco--------------	Somewhat limited		Somewhat limited	
	Low adsorption	0.59	Too acid	0.55
	Depth to saturated zone	0.32	Depth to saturated zone	0.32
	Too acid	0.14	Low adsorption	0.02
NnA:				
Noboco--------------	Very limited		Very limited	
	Filtering capacity	0.99	Filtering capacity	0.99
	Depth to saturated zone	0.46	Too acid	0.55
	Too acid	0.14	Depth to saturated zone	0.46
Goldsboro-----------	Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Too acid	0.62	Too acid	1.00
	Low adsorption	0.40		
NoA:				
Norfolk-------------	Very limited		Very limited	
	Dense layer	1.00	Filtering capacity	0.99
	Filtering capacity	0.99	Too acid	0.14
	Too acid	0.03		

Agricultural Disposal of Manure, Food-Processing Waste, and Sewage Sludge—Continued

Map symbol and soil name	Application of manure and food-processing waste: Rating class and limiting features	Value	Application of sewage sludge: Rating class and limiting features	Value
NoB:				
Norfolk	Somewhat limited		Somewhat limited	
	Low adsorption	0.11	Too acid	0.14
	Too acid	0.03		
OkA:				
Okeetee	Very limited		Very limited	
	Slow water movement	1.00	Depth to saturated zone	1.00
	Depth to saturated zone	1.00	Slow water movement	1.00
	Too acid	0.92	Too acid	1.00
OrA:				
Orangeburg	Very limited		Very limited	
	Filtering capacity	0.99	Filtering capacity	0.99
	Low adsorption	0.86	Too acid	0.91
	Too acid	0.32	Low adsorption	0.71
OrB:				
Orangeburg	Very limited		Very limited	
	Filtering capacity	0.99	Filtering capacity	0.99
	Low adsorption	0.79	Too acid	0.91
	Too acid	0.32	Low adsorption	0.33
OsB2:				
Orangeburg	Somewhat limited		Somewhat limited	
	Low adsorption	0.54	Too acid	0.91
	Too acid	0.32	Low adsorption	0.50
PaA:				
Paxville	Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Filtering capacity	0.99	Flooding	1.00
			Too acid	1.00
	Too acid	0.92		
PeA, PeB:				
Pelion	Very limited		Very limited	
	Filtering capacity	0.99	Too acid	1.00
			Filtering capacity	0.99
	Depth to saturated zone	0.99	Depth to saturated zone	0.99
	Low adsorption	0.94		
PtD:				
Pits	Not rated		Not rated	
Udorthents	Not rated		Not rated	

Agricultural Disposal of Manure, Food-Processing Waste, and Sewage Sludge—Continued

Map symbol and soil name	Application of manure and food-processing waste: Rating class and limiting features	Value	Application of sewage sludge: Rating class and limiting features	Value
RaA:				
Rains	Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Leaching	0.70	Too acid	0.99
	Too acid	0.43		
SmA:				
Smithboro	Very limited		Very limited	
	Slow water movement	1.00	Depth to saturated zone	1.00
	Depth to saturated zone	1.00	Slow water movement	1.00
	Low adsorption	0.66	Too acid	0.91
StA:				
State	Very limited		Very limited	
	Filtering capacity	0.99	Low adsorption	1.00
	Too acid	0.50	Filtering capacity	0.99
	Depth to saturated zone	0.08	Too acid	0.99
Eunola	Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Too acid	0.37	Too acid	0.96
	Low adsorption	0.04	Flooding	0.40
ThA:				
Thursa	Somewhat limited		Somewhat limited	
	Low adsorption	0.84	Low adsorption	0.47
	Too acid	0.08	Too acid	0.31
ThB:				
Thursa	Somewhat limited		Somewhat limited	
	Low adsorption	0.95	Too acid	0.55
	Too acid	0.14	Low adsorption	0.53
TrB:				
Troup	Very limited		Very limited	
	Filtering capacity	0.99	Filtering capacity	0.99
	Leaching	0.45	Too acid	0.91
	Too acid	0.32		
TrC:				
Troup	Very limited		Very limited	
	Filtering capacity	0.99	Filtering capacity	0.99
	Leaching	0.45	Too acid	0.91
	Too acid	0.32	Slope	0.01
UdD:				
Udorthents, refuse substratum	Not rated		Not rated	
Pits	Not rated		Not rated	

Agricultural Disposal of Manure, Food-Processing Waste, and Sewage Sludge—Continued

Map symbol and soil name	Application of manure and food-processing waste		Application of sewage sludge	
	Rating class and limiting features	Value	Rating class and limiting features	Value
VaC:				
Vaucluse------------	Very limited		Very limited	
	Droughty	1.00	Droughty	1.00
	Dense layer	1.00	Too acid	1.00
	Filtering capacity	0.99	Filtering capacity	0.99
WaB:				
Wagram--------------	Very limited		Very limited	
	Filtering capacity	0.99	Filtering capacity	0.99
	Leaching	0.45	Too acid	0.91
	Too acid	0.32		

Agricultural Disposal of Wastewater by Irrigation and Overland Flow

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. See text for further explanation of ratings in this table.)

Map symbol and soil name	Disposal of wastewater by irrigation: Rating class and limiting features	Value	Overland flow of wastewater: Rating class and limiting features	Value
AaB:				
Ailey	Very limited		Very limited	
	Droughty	1.00	Seepage	1.00
	Filtering capacity	0.99	Too acid	0.77
	Too acid	0.77		
Barnwell	Very limited		Very limited	
	Filtering capacity	0.99	Seepage	1.00
			Low adsorption	0.99
	Low adsorption	0.99	Too acid	0.96
	Too acid	0.96		
AcC:				
Ailey	Very limited		Very limited	
	Droughty	1.00	Seepage	1.00
	Too steep for surface application	1.00	Low adsorption	0.84
			Too acid	0.77
	Filtering capacity	0.99		
Troup	Very limited		Very limited	
	Too steep for surface application	1.00	Seepage	1.00
			Too acid	0.91
			Too steep for surface application	0.22
	Filtering capacity	0.99		
	Too acid	0.91		
Vaucluse	Very limited		Very limited	
	Droughty	1.00	Seepage	1.00
	Too steep for surface application	1.00	Too acid	1.00
			Too steep for surface application	0.22
	Too acid	1.00		
AeD:				
Ailey	Very limited		Very limited	
	Droughty	1.00	Seepage	1.00
	Too steep for surface application	1.00	Too steep for surface application	1.00
	Filtering capacity	0.99	Low adsorption	0.84
Vaucluse	Very limited		Very limited	
	Droughty	1.00	Seepage	1.00
	Too steep for surface application	1.00	Too steep for surface application	1.00
	Too acid	1.00	Too acid	1.00

Agricultural Disposal of Wastewater by Irrigation and Overland Flow—Continued

Map symbol and soil name	Disposal of wastewater by irrigation		Overland flow of wastewater	
	Rating class and limiting features	Value	Rating class and limiting features	Value
Troup	Very limited		Very limited	
	Too steep for surface application	1.00	Seepage	1.00
	Filtering capacity	0.99	Too steep for surface application	1.00
	Too acid	0.91	Too acid	0.91
AgB:				
Alaga	Very limited		Very limited	
	Filtering capacity	0.99	Seepage	1.00
	Too acid	0.99	Too acid	0.99
	Droughty	0.34		
AoB:				
Alaga	Very limited		Very limited	
	Filtering capacity	0.99	Seepage	1.00
			Flooding	0.40
	Too acid	0.21	Too acid	0.21
	Low adsorption	0.02		
Lucknow	Very limited		Very limited	
	Too acid	1.00	Seepage	1.00
	Filtering capacity	0.99	Too acid	1.00
			Flooding	0.40
	Low adsorption	0.25		
ApB:				
Alpin	Very limited		Very limited	
	Filtering capacity	0.99	Seepage	1.00
			Too acid	0.99
	Too acid	0.99	Low adsorption	0.61
	Droughty	0.89		
ApD:				
Alpin	Very limited		Very limited	
	Too steep for surface application	1.00	Seepage	1.00
			Too acid	0.99
			Too steep for surface application	0.78
	Filtering capacity	0.99		
	Too acid	0.99		
AuB:				
Autryville	Very limited		Very limited	
	Filtering capacity	0.99	Seepage	1.00
			Too acid	0.91
	Too acid	0.91		
BaB:				
Barnwell	Very limited		Very limited	
	Filtering capacity	0.99	Seepage	1.00
			Low adsorption	0.99
	Low adsorption	0.99	Too acid	0.96
	Too acid	0.96		

Agricultural Disposal of Wastewater by Irrigation and Overland Flow—Continued

Map symbol and soil name	Disposal of wastewater by irrigation: Rating class and limiting features	Value	Overland flow of wastewater: Rating class and limiting features	Value
BbB2:				
Barnwell	Very limited		Very limited	
	Low adsorption	1.00	Seepage	1.00
	Too acid	0.96	Low adsorption	1.00
	Slow water movement	0.22	Too acid	0.96
BcC:				
Barnwell	Very limited		Very limited	
	Too steep for surface application	1.00	Seepage	1.00
			Low adsorption	0.99
			Too acid	0.96
	Filtering capacity	0.99		
	Low adsorption	0.99		
Cowarts	Very limited		Very limited	
	Too steep for surface application	1.00	Seepage	1.00
			Too acid	0.99
			Too steep for surface application	0.22
	Filtering capacity	0.99		
	Too acid	0.99		
Troup	Very limited		Very limited	
	Too steep for surface application	1.00	Seepage	1.00
			Too acid	0.91
			Too steep for surface application	0.22
	Filtering capacity	0.99		
	Too acid	0.91		
BoB:				
Bonneau	Very limited		Very limited	
	Filtering capacity	0.99	Seepage	1.00
			Too acid	0.07
	Too acid	0.07	Depth to saturated zone	0.01
	Depth to saturated zone	0.01		
BuA:				
Butters	Very limited		Very limited	
	Filtering capacity	0.99	Seepage	1.00
			Too acid	0.99
	Too acid	0.99	Low adsorption	0.13
	Low adsorption	0.13		
CaB:				
Candor	Very limited		Very limited	
	Filtering capacity	0.99	Seepage	1.00
			Too acid	0.99
	Too acid	0.99	Low adsorption	0.01
	Droughty	0.01		

Agricultural Disposal of Wastewater by Irrigation and Overland Flow—Continued

Map symbol and soil name	Disposal of wastewater by irrigation		Overland flow of wastewater	
	Rating class and limiting features	Value	Rating class and limiting features	Value
CcA:				
Chastain------------	Very limited		Very limited	
	Depth to saturated zone	1.00	Flooding	1.00
	Flooding	1.00	Depth to saturated zone	1.00
	Slow water movement	1.00	Too acid	0.99
Chewacla------------	Very limited		Very limited	
	Depth to saturated zone	1.00	Flooding	1.00
	Flooding	1.00	Depth to saturated zone	1.00
	Too acid	0.99	Seepage	1.00
ChA:				
Chewacla------------	Very limited		Very limited	
	Depth to saturated zone	1.00	Flooding	1.00
	Flooding	1.00	Depth to saturated zone	1.00
	Too acid	0.99	Seepage	1.00
Chastain------------	Very limited		Very limited	
	Depth to saturated zone	1.00	Flooding	1.00
	Flooding	1.00	Depth to saturated zone	1.00
	Slow water movement	1.00	Too acid	0.99
CwD:				
Cowarts-------------	Very limited		Very limited	
	Too steep for surface application	1.00	Seepage	1.00
	Filtering capacity	0.99	Too steep for surface application	1.00
	Too acid	0.99	Too acid	0.99
CxA:				
Coxville------------	Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Low adsorption	0.39	Seepage	1.00
	Slow water movement	0.22	Low adsorption	0.39
DaA:				
Dorovan-------------	Very limited		Very limited	
	Depth to saturated zone	1.00	Flooding	1.00
	Flooding	1.00	Depth to saturated zone	1.00
	Too acid	1.00	Seepage	1.00
DoA:				
Dothan--------------	Very limited		Very limited	
	Filtering capacity	0.99	Seepage	1.00
	Low adsorption	0.88	Low adsorption	0.88
	Too acid	0.55	Too acid	0.55

Agricultural Disposal of Wastewater by Irrigation and Overland Flow—Continued

Map symbol and soil name	Disposal of wastewater by irrigation: Rating class and limiting features	Value	Overland flow of wastewater: Rating class and limiting features	Value
DoB:				
Dothan	Very limited		Very limited	
	Filtering capacity	0.99	Seepage	1.00
	Low adsorption	0.66	Low adsorption	0.66
	Too acid	0.55	Too acid	0.55
DtB2:				
Dothan	Somewhat limited		Very limited	
	Low adsorption	0.89	Seepage	1.00
	Too acid	0.55	Low adsorption	0.89
	Droughty	0.15	Too acid	0.55
EuA:				
Eunola	Very limited		Very limited	
	Depth to saturated zone	1.00	Seepage	1.00
	Too acid	0.96	Depth to saturated zone	1.00
	Low adsorption	0.04	Too acid	0.96
FaA, FaB:				
Faceville	Very limited		Very limited	
	Filtering capacity	0.99	Seepage	1.00
	Low adsorption	0.96	Low adsorption	0.96
	Too acid	0.31	Too acid	0.31
FbB2:				
Faceville	Very limited		Very limited	
	Low adsorption	1.00	Seepage	1.00
	Too acid	0.31	Low adsorption	1.00
	Too steep for surface application	0.08	Too acid	0.31
FoB:				
Foxworth	Very limited		Very limited	
	Too acid	1.00	Seepage	1.00
	Filtering capacity	0.99	Too acid	1.00
	Droughty	0.75	Low adsorption	0.62
FuB:				
Fuquay	Very limited		Very limited	
	Too acid	1.00	Seepage	1.00
	Filtering capacity	0.99	Too acid	1.00
	Low adsorption	0.99	Low adsorption	0.9
GoA:				
Goldsboro	Very limited		Very limited	
	Depth to saturated zone	1.00	Seepage	1.00
	Too acid	1.00	Depth to saturated zone	1.00
	Low adsorption	0.40	Too acid	1.00

Agricultural Disposal of Wastewater by Irrigation and Overland Flow—Continued

Map symbol and soil name	Disposal of wastewater by irrigation		Overland flow of wastewater	
	Rating class and limiting features	Value	Rating class and limiting features	Value
JhA:				
Johns	Very limited		Very limited	
	Depth to saturated zone	1.00	Seepage	1.00
	Filtering capacity	0.99	Depth to saturated zone	1.00
	Too acid	0.01	Flooding	0.40
JoA:				
Johnston	Very limited		Very limited	
	Depth to saturated zone	1.00	Flooding	1.00
	Flooding	1.00	Depth to saturated zone	1.00
	Too acid	1.00	Seepage	1.00
JzA:				
Johnston	Very limited		Very limited	
	Depth to saturated zone	1.00	Flooding	1.00
	Flooding	1.00	Depth to saturated zone	1.00
	Too acid	1.00	Seepage	1.00
Mouzon	Very limited		Very limited	
	Depth to saturated zone	1.00	Flooding	1.00
	Flooding	1.00	Depth to saturated zone	1.00
	Slow water movement	1.00	Seepage	1.00
KaA:				
Kalmia	Very limited		Very limited	
	Filtering capacity	0.99	Seepage	1.00
			Flooding	0.40
	Low adsorption	0.23	Low adsorption	0.23
	Too acid	0.21		
LaB:				
Lakeland	Very limited		Very limited	
	Filtering capacity	0.99	Seepage	1.00
			Too acid	0.99
	Too acid	0.99		
	Droughty	0.99		
LaD:				
Lakeland	Very limited		Very limited	
	Too steep for surface application	1.00	Seepage	1.00
			Too acid	0.99
			Too steep for surface application	0.94
	Filtering capacity	0.99		
	Too acid	0.99		
LbB:				
Lucknow	Very limited		Very limited	
	Too acid	1.00	Seepage	1.00
	Filtering capacity	0.99	Too acid	1.00
			Low adsorption	0.25
	Low adsorption	0.25		

Agricultural Disposal of Wastewater by Irrigation and Overland Flow—Continued

Map symbol and soil name	Disposal of wastewater by irrigation: Rating class and limiting features	Value	Overland flow of wastewater: Rating class and limiting features	Value
LcB:				
Lucy	Very limited		Very limited	
	Filtering capacity	0.99	Seepage	1.00
	Too acid	0.77	Too acid	0.77
LuA:				
Lumbee	Very limited		Very limited	
	Depth to saturated zone	1.00	Seepage	1.00
	Filtering capacity	0.99	Depth to saturated zone	1.0
	Too acid	0.67	Too acid	0.67
LyA:				
Lynchburg	Very limited		Very limited	
	Depth to saturated zone	1.00	Seepage	1.00
	Too acid	0.96	Depth to saturated zone	1.00
	Low adsorption	0.11	Too acid	0.96
MaA:				
Marvyn	Very limited		Very limited	
	Filtering capacity	0.99	Seepage	1.00
	Too acid	0.67	Too acid	0.67
	Low adsorption	0.28	Low adsorption	0.28
MaB:				
Marvyn	Very limited		Very limited	
	Filtering capacity	0.99	Seepage	1.00
	Too acid	0.67	Too acid	0.67
	Low adsorption	0.53	Low adsorption	0.53
MeA:				
Meggett	Very limited		Very limited	
	Depth to saturated zone	1.00	Flooding	1.00
	Slow water movement	1.00	Depth to saturated zone	1.00
	Too acid	0.96	Seepage	1.00
MyA:				
Myatt	Very limited		Very limited	
	Depth to saturated zone	1.00	Flooding	1.00
	Too acid	1.00	Seepage	1.00
	Flooding	0.60	Depth to saturated zone	1.00
Paxville	Very limited		Very limited	
	Depth to saturated zone	1.00	Flooding	1.00
	Too acid	1.00	Seepage	1.00
	Filtering capacity	0.99	Depth to saturated zone	1.00

Agricultural Disposal of Wastewater by Irrigation and Overland Flow—Continued

Map symbol and soil name	Disposal of wastewater by irrigation		Overland flow of wastewater	
	Rating class and limiting features	Value	Rating class and limiting features	Value
NaB2:				
Nankin	Somewhat limited		Very limited	
	Low adsorption	0.99	Seepage	1.00
	Slow water movement	0.78	Low adsorption	0.99
	Too acid	0.67	Too acid	0.67
NbC:				
Nankin	Very limited		Very limited	
	Too steep for surface application	1.00	Seepage	1.00
	Filtering capacity	0.99	Too acid	0.85
	Too acid	0.85	Too steep for surface application	0.22
Lucy	Very limited		Very limited	
	Too steep for surface application	1.00	Seepage	1.00
	Filtering capacity	0.99	Too acid	0.77
	Too acid	0.77	Too steep for surface application	0.22
NbD:				
Nankin	Very limited		Very limited	
	Too steep for surface application	1.00	Seepage	1.00
	Too acid	0.99	Too acid	0.99
	Too steep for sprinkler application	0.60	Too steep for surface application	0.94
Lucy	Very limited		Very limited	
	Too steep for surface application	1.00	Seepage	1.00
	Filtering capacity	0.99	Too steep for surface application	0.94
	Too acid	0.77	Too acid	0.77
NeB:				
Noboco	Very limited		Very limited	
	Filtering capacity	0.99	Seepage	1.00
	Too acid	0.55	Too acid	0.55
	Depth to saturated zone	0.32	Depth to saturated zone	0.32
NmB2:				
Noboco	Somewhat limited		Very limited	
	Low adsorption	0.59	Seepage	1.00
	Too acid	0.55	Low adsorption	0.59
	Depth to saturated zone	0.32	Too acid	0.55

Agricultural Disposal of Wastewater by Irrigation and Overland Flow—Continued

Map symbol and soil name	Disposal of wastewater by irrigation: Rating class and limiting features	Value	Overland flow of wastewater: Rating class and limiting features	Value
NnA:				
Noboco	Very limited		Very limited	
	Filtering capacity	0.99	Seepage	1.00
	Too acid	0.55	Too acid	0.55
	Depth to saturated zone	0.46	Depth to saturated zone	0.46
Goldsboro	Very limited		Very limited	
	Depth to saturated zone	1.00	Seepage	1.00
	Too acid	1.00	Depth to saturated zone	1.00
	Low adsorption	0.40	Too acid	1.00
NoA:				
Norfolk	Very limited		Very limited	
	Filtering capacity	0.99	Seepage	1.00
	Too acid	0.14	Too acid	0.14
	Low adsorption	0.01	Low adsorption	0.01
NoB:				
Norfolk	Somewhat limited		Very limited	
	Too acid	0.14	Seepage	1.00
	Low adsorption	0.11	Too acid	0.14
	Too steep for surface application	0.08	Low adsorption	0.11
OkA:				
Okeetee	Very limited		Very limited	
	Depth to saturated zone	1.00	Seepage	1.00
	Slow water movement	1.00	Depth to saturated zone	1.00
	Too acid	1.00	Too acid	1.00
OrA:				
Orangeburg	Very limited		Very limited	
	Filtering capacity	0.99	Seepage	1.00
	Too acid	0.91	Too acid	0.91
	Low adsorption	0.86	Low adsorption	0.86
OrB:				
Orangeburg	Very limited		Very limited	
	Filtering capacity	0.99	Seepage	1.00
	Too acid	0.91	Too acid	0.91
	Low adsorption	0.79	Low adsorption	0.79
OsB2:				
Orangeburg	Somewhat limited		Very limited	
	Too acid	0.91	Seepage	1.00
	Low adsorption	0.54	Too acid	0.91
	Too steep for surface application	0.08	Low adsorption	0.54

Agricultural Disposal of Wastewater by Irrigation and Overland Flow—Continued

Map symbol and soil name	Disposal of wastewater by irrigation		Overland flow of wastewater	
	Rating class and limiting features	Value	Rating class and limiting features	Value
PaA:				
Paxville	Very limited		Very limited	
	Depth to saturated zone	1.00	Flooding	1.00
	Too acid	1.00	Seepage	1.00
	Filtering capacity	0.99	Depth to saturated zone	1.00
PeA, PeB:				
Pelion	Very limited		Very limited	
	Too acid	1.00	Seepage	1.00
	Filtering capacity	0.99	Too acid	1.00
	Depth to saturated zone	0.99	Depth to saturated zone	0.99
PtD:				
Pits	Not rated		Not rated	
Udorthents	Not rated		Not rated	
RaA:				
Rains	Very limited		Very limited	
	Depth to saturated zone	1.00	Seepage	1.00
	Too acid	0.99	Depth to saturated zone	1.00
			Too acid	0.99
SmA:				
Smithboro	Very limited		Very limited	
	Depth to saturated zone	1.00	Seepage	1.00
	Slow water movement	1.00	Depth to saturated zone	1.00
	Too acid	0.91	Too acid	0.91
StA:				
State	Very limited		Very limited	
	Filtering capacity	0.99	Seepage	1.00
	Too acid	0.99	Too acid	0.99
	Depth to saturated zone	0.08	Flooding	0.40
Eunola	Very limited		Very limited	
	Depth to saturated zone	1.00	Seepage	1.00
	Too acid	0.96	Depth to saturated zone	1.00
	Low adsorption	0.04	Too acid	0.96
ThA:				
Thursa	Somewhat limited		Very limited	
	Low adsorption	0.84	Seepage	1.00
	Too acid	0.31	Low adsorption	0.84
			Too acid	0.31

Agricultural Disposal of Wastewater by Irrigation and Overland Flow—Continued

Map symbol and soil name	Disposal of wastewater by irrigation: Rating class and limiting features	Value	Overland flow of wastewater: Rating class and limiting features	Value
ThB:				
Thursa	Somewhat limited		Very limited	
	Low adsorption	0.95	Seepage	1.00
	Too acid	0.55	Low adsorption	0.95
			Too acid	0.55
TrB:				
Troup	Very limited		Very limited	
	Filtering capacity	0.99	Seepage	1.00
	Too acid	0.91	Too acid	0.91
	Low adsorption	0.01	Low adsorption	0.01
TrC:				
Troup	Very limited		Very limited	
	Too steep for surface application	1.00	Seepage	1.00
	Filtering capacity	0.99	Too acid	0.91
	Too acid	0.91	Too steep for surface application	0.22
UdD:				
Udorthents, refuse substratum	Not rated		Not rated	
Pits	Not rated		Not rated	
VaC:				
Vaucluse	Very limited		Very limited	
	Droughty	1.00	Seepage	1.00
	Too steep for surface application	1.00	Too acid	1.00
	Too acid	1.00	Too steep for surface application	0.22
WaB:				
Wagram	Very limited		Very limited	
	Filtering capacity	0.99	Seepage	1.00
	Too acid	0.91	Too acid	0.91
	Low adsorption	0.03	Low adsorption	0.03

Agricultural Disposal of Wastewater by Rapid Infiltration and Slow Rate Treatment

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. See text for further explanation of ratings in this table.)

Map symbol and soil name	Rapid infiltration of wastewater: Rating class and limiting features	Value	Slow rate treatment of wastewater: Rating class and limiting features	Value
AaB:				
Ailey	Not limited		Very limited	
			Filtering capacity	0.99
			Too acid	0.77
Barnwell	Very limited		Very limited	
	Slow water movement	1.00	Filtering capacity	0.99
	Too acid	0.31	Low adsorption	0.99
	Depth to saturated zone	0.04	Too acid	0.96
AcC:				
Ailey	Very limited		Very limited	
	Slope	1.00	Too steep for surface application	1.00
			Filtering capacity	0.99
			Low adsorption	0.84
Troup	Very limited		Very limited	
	Slope	1.00	Too steep for surface application	1.00
	Slow water movement	0.99	Filtering capacity	0.99
	Too acid	0.03	Too acid	0.91
Vaucluse	Very limited		Very limited	
	Slope	1.00	Too steep for surface application	1.00
	Slow water movement	0.99	Too acid	1.00
	Too acid	0.14	Filtering capacity	0.99
AeD:				
Ailey	Very limited		Very limited	
	Slope	1.00	Too steep for surface application	1.00
			Too steep for sprinkler irrigation	1.00
			Filtering capacity	0.99

Agricultural Disposal of Wastewater by Rapid Infiltration and Slow Rate Treatment—Continued

Map symbol and soil name	Rapid infiltration of wastewater		Slow rate treatment of wastewater	
	Rating class and limiting features	Value	Rating class and limiting features	Value
Vaucluse------------	Very limited		Very limited	
	Slope	1.00	Too steep for surface application	1.00
	Slow water movement	0.99	Too steep for sprinkler irrigation	1.00
	Too acid	0.14	Too acid	1.00
Troup---------------	Very limited		Very limited	
	Slope	1.00	Too steep for surface application	1.00
	Slow water movement	0.99	Too steep for sprinkler irrigation	1.00
	Too acid	0.03	Filtering capacity	0.99
AgB:				
Alaga---------------	Very limited		Very limited	
	Depth to saturated zone	1.00	Filtering capacity	0.99
			Too acid	0.99
AoB:				
Alaga---------------	Very limited		Very limited	
	Depth to saturated zone	1.00	Filtering capacity	0.99
			Too acid	0.21
			Low adsorption	0.02
Lucknow-------------	Very limited		Very limited	
	Depth to saturated zone	1.00	Too acid	1.00
	Slow water movement	0.99	Filtering capacity	0.99
	Too acid	0.42	Low adsorption	0.25
ApB:				
Alpin---------------	Somewhat limited		Very limited	
	Slow water movement	0.32	Filtering capacity	0.99
	Too acid	0.07	Too acid	0.99
			Low adsorption	0.61
ApD:				
Alpin---------------	Very limited		Very limited	
	Slope	1.00	Too steep for surface application	1.00
	Slow water movement	0.32	Filtering capacity	0.99
	Too acid	0.07	Too acid	0.99

Agricultural Disposal of Wastewater by Rapid Infiltration and Slow Rate Treatment—Continued

Map symbol and soil name	Rapid infiltration of wastewater		Slow rate treatment of wastewater	
	Rating class and limiting features	Value	Rating class and limiting features	Value
AuB:				
Autryville----------	Very limited		Very limited	
	Depth to saturated zone	1.00	Filtering capacity	0.99
	Slow water movement	0.99	Too acid	0.91
	Too acid	0.07		
BaB:				
Barnwell------------	Very limited		Very limited	
	Slow water movement	1.00	Filtering capacity	0.99
	Too acid	0.31	Low adsorption	0.99
	Depth to saturated zone	0.04	Too acid	0.96
BbB2:				
Barnwell------------	Very limited		Very limited	
	Slow water movement	1.00	Low adsorption	1.00
			Too acid	0.9
	Too acid	0.42	Slow water movement	0.15
	Depth to saturated zone	0.04		
BcC:				
Barnwell------------	Very limited		Very limited	
	Slow water movement	1.00	Too steep for surface application	1.00
	Slope	1.00		
	Too acid	0.31	Filtering capacity	0.99
			Low adsorption	0.99
Cowarts-------------	Very limited		Very limited	
	Slope	1.00	Too steep for surface application	1.00
	Slow water movement	0.99		
			Filtering capacity	0.99
			Too acid	0.99
Troup---------------	Very limited		Very limited	
	Slope	1.00	Too steep for surface application	1.00
	Slow water movement	0.99		
	Too acid	0.03	Filtering capacity	0.99
			Too acid	0.91
BoB:				
Bonneau-------------	Very limited		Very limited	
	Depth to saturated zone	1.00	Filtering capacity	0.99
	Slow water movement	0.99	Too acid	0.07
			Depth to saturated zone	0.01

Agricultural Disposal of Wastewater by Rapid Infiltration and Slow Rate Treatment—Continued

Map symbol and soil name	Rapid infiltration of wastewater		Slow rate treatment of wastewater	
	Rating class and limiting features	Value	Rating class and limiting features	Value
BuA:				
Butters	Very limited		Very limited	
	Depth to saturated zone	1.00	Filtering capacity	0.99
	Slow water movement	0.99	Too acid	0.99
	Too acid	0.07	Low adsorption	0.13
CaB:				
Candor	Very limited		Very limited	
	Slow water movement	0.99	Filtering capacity	0.99
	Too acid	0.21	Too acid	0.99
			Low adsorption	0.01
CcA:				
Chastain	Very limited		Very limited	
	Flooding	1.00	Depth to saturated zone	1.00
	Slow water movement	1.00	Flooding	1.00
	Depth to saturated zone	1.00	Filtering capacity	0.99
Chewacla	Very limited		Very limited	
	Flooding	1.00	Depth to saturated zone	1.00
	Depth to saturated zone	1.00	Flooding	1.00
	Slow water movement	0.99	Too acid	0.99
ChA:				
Chewacla	Very limited		Very limited	
	Flooding	1.00	Depth to saturated zone	1.00
	Depth to saturated zone	1.00	Flooding	1.00
	Slow water movement	0.99	Too acid	0.99
Chastain	Very limited		Very limited	
	Flooding	1.00	Depth to saturated zone	1.00
	Slow water movement	1.00	Flooding	1.00
	Depth to saturated zone	1.00	Filtering capacity	0.99
CwD:				
Cowarts	Very limited		Very limited	
	Slope	1.00	Too steep for surface application	1.00
	Slow water movement	0.99	Too steep for sprinkler irrigation	1.00
			Filtering capacity	0.99

Agricultural Disposal of Wastewater by Rapid Infiltration and Slow Rate Treatment—Continued

Map symbol and soil name	Rapid infiltration of wastewater		Slow rate treatment of wastewater	
	Rating class and limiting features	Value	Rating class and limiting features	Value
CxA:				
Coxville------------	Very limited		Very limited	
	Slow water movement	1.00	Depth to saturated zone	1.00
	Depth to saturated zone	1.00	Low adsorption	0.39
	Too acid	0.14	Slow water movement	0.15
DaA:				
Dorovan-------------	Very limited		Very limited	
	Flooding	1.00	Depth to saturated zone	1.00
	Depth to saturated zone	1.00	Flooding	1.00
	Slow water movement	1.00	Too acid	1.00
DoA:				
Dothan--------------	Very limited		Very limited	
	Slow water movement	0.99	Filtering capacity	0.99
	Too acid	0.14	Low adsorption	0.88
	Depth to saturated zone	0.02	Too acid	0.55
DoB:				
Dothan--------------	Very limited		Very limited	
	Slow water movement	0.99	Filtering capacity	0.99
	Too acid	0.14	Low adsorption	0.66
	Depth to saturated zone	0.01	Too acid	0.55
DtB2:				
Dothan--------------	Very limited		Somewhat limited	
	Slow water movement	0.99	Low adsorption	0.89
			Too acid	0.55
	Too acid	0.14	Too steep for surface application	0.08
	Depth to saturated zone	0.01		
EuA:				
Eunola--------------	Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Slow water movement	0.99	Too acid	0.96
			Low adsorption	0.04
	Too acid	0.03		
FaA, FaB:				
Faceville-----------	Very limited		Very limited	
	Slow water movement	0.99	Filtering capacity	0.99
			Low adsorption	0.96
			Too acid	0.31

Agricultural Disposal of Wastewater by Rapid Infiltration and Slow Rate Treatment—Continued

Map symbol and soil name	Rapid infiltration of wastewater		Slow rate treatment of wastewater	
	Rating class and limiting features	Value	Rating class and limiting features	Value
FbB2:				
Faceville	Very limited		Very limited	
	Slow water movement	0.99	Low adsorption	1.00
			Too acid	0.31
			Too steep for surface application	0.08
FoB:				
Foxworth	Very limited		Very limited	
	Depth to saturated zone	1.00	Too acid	1.00
	Too acid	0.21	Filtering capacity	0.99
			Low adsorption	0.62
FuB:				
Fuquay	Very limited		Very limited	
	Slow water movement	0.99	Too acid	1.00
	Too acid	0.55	Filtering capacity	0.99
			Low adsorption	0.99
GoA:				
Goldsboro	Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Slow water movement	0.99	Too acid	1.00
	Too acid	0.14	Low adsorption	0.40
JhA:				
Johns	Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Slow water movement	0.99	Filtering capacity	0.99
	Too acid	0.21	Too acid	0.01
JoA:				
Johnston	Very limited		Very limited	
	Flooding	1.00	Depth to saturated zone	1.00
	Depth to saturated zone	1.00	Flooding	1.00
	Slow water movement	0.32	Too acid	1.00
JzA:				
Johnston	Very limited		Very limited	
	Flooding	1.00	Depth to saturated zone	1.00
	Depth to saturated zone	1.00	Flooding	1.00
	Slow water movement	0.32	Too acid	1.00

Agricultural Disposal of Wastewater by Rapid Infiltration and Slow Rate Treatment—Continued

Map symbol and soil name	Rapid infiltration of wastewater		Slow rate treatment of wastewater	
	Rating class and limiting features	Value	Rating class and limiting features	Value
Mouzon	Very limited		Very limited	
	Flooding	1.00	Depth to saturated zone	1.00
	Slow water movement	1.00	Flooding	1.00
	Depth to saturated zone	1.00	Filtering capacity	0.99
KaA:				
Kalmia	Very limited		Very limited	
	Depth to saturated zone	1.00	Filtering capacity	0.99
	Slow water movement	0.99	Low adsorption	0.23
	Too acid	0.01	Too acid	0.21
LaB:				
Lakeland	Not limited		Very limited	
			Filtering capacity	0.99
			Too acid	0.99
LaD:				
Lakeland	Very limited		Very limited	
	Slope	1.00	Too steep for surface application	1.00
			Filtering capacity	0.99
			Too acid	0.99
LbB:				
Lucknow	Very limited		Very limited	
	Depth to saturated zone	1.00	Too acid	1.00
	Slow water movement	0.99	Filtering capacity	0.99
	Too acid	0.42	Low adsorption	0.25
LcB:				
Lucy	Very limited		Very limited	
	Slow water movement	0.99	Filtering capacity	0.99
			Too acid	0.77
LuA:				
Lumbee	Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Slow water movement	0.99	Filtering capacity	0.99
			Too acid	0.67
LyA:				
Lynchburg	Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Slow water movement	0.99	Too acid	0.96
			Low adsorption	0.11

Agricultural Disposal of Wastewater by Rapid Infiltration and Slow Rate Treatment—Continued

Map symbol and soil name	Rapid infiltration of wastewater		Slow rate treatment of wastewater	
	Rating class and limiting features	Value	Rating class and limiting features	Value
MaA:				
Marvyn	Very limited		Very limited	
	Slow water movement	0.99	Filtering capacity	0.99
			Too acid	0.67
			Low adsorption	0.28
MaB:				
Marvyn	Very limited		Very limited	
	Slow water movement	0.99	Filtering capacity	0.99
			Too acid	0.67
			Low adsorption	0.53
MeA:				
Meggett	Very limited		Very limited	
	Slow water movement	1.00	Depth to saturated zone	1.00
	Depth to saturated zone	1.00	Too acid	0.96
	Flooding	0.60	Slow water movement	0.94
MyA:				
Myatt	Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Slow water movement	0.99	Too acid	1.00
	Flooding	0.60	Flooding	0.60
Paxville	Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Slow water movement	0.99	Too acid	1.00
	Flooding	0.60	Filtering capacity	0.99
NaB2:				
Nankin	Very limited		Somewhat limited	
	Slow water movement	1.00	Low adsorption	0.99
	Too acid	0.14	Too acid	0.67
			Slow water movement	0.60
NbC:				
Nankin	Very limited		Very limited	
	Slow water movement	1.00	Too steep for surface application	1.00
	Slope	1.00	Filtering capacity	0.99
	Too acid	0.14	Too acid	0.85

Agricultural Disposal of Wastewater by Rapid Infiltration and Slow Rate Treatment—Continued

Map symbol and soil name	Rapid infiltration of wastewater		Slow rate treatment of wastewater	
	Rating class and limiting features	Value	Rating class and limiting features	Value
Lucy	Very limited		Very limited	
	Slope	1.00	Too steep for surface application	1.00
	Slow water movement	0.99	Filtering capacity	0.99
			Too acid	0.77
NbD:				
Nankin	Very limited		Very limited	
	Slope	1.00	Too steep for surface application	1.00
	Slow water movement	1.00	Too acid	0.99
	Too acid	0.14	Too steep for sprinkler irrigation	0.94
Lucy	Very limited		Very limited	
	Slope	1.00	Too steep for surface application	1.00
	Slow water movement	0.99	Filtering capacity	0.99
			Too steep for sprinkler irrigation	0.94
NeB:				
Noboco	Very limited		Very limited	
	Depth to saturated zone	1.00	Filtering capacity	0.99
	Slow water movement	0.99	Too acid	0.55
	Too acid	0.77	Depth to saturated zone	0.32
NmB2:				
Noboco	Very limited		Somewhat limited	
	Depth to saturated zone	1.00	Low adsorption	0.59
	Slow water movement	0.99	Too acid	0.55
	Too acid	0.77	Depth to saturated zone	0.32
NnA:				
Noboco	Very limited		Very limited	
	Depth to saturated zone	1.00	Filtering capacity	0.99
	Slow water movement	0.99	Too acid	0.55
	Too acid	0.77	Depth to saturated zone	0.46
Goldsboro	Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Slow water movement	0.99	Too acid	1.00
	Too acid	0.14	Low adsorption	0.40

Agricultural Disposal of Wastewater by Rapid Infiltration and Slow Rate Treatment—Continued

Map symbol and soil name	Rapid infiltration of wastewater: Rating class and limiting features	Value	Slow rate treatment of wastewater: Rating class and limiting features	Value
NoA:				
Norfolk	Very limited		Very limited	
	Depth to saturated zone	1.00	Filtering capacity	0.99
	Slow water movement	0.99	Too acid	0.14
			Low adsorption	0.01
NoB:				
Norfolk	Very limited		Somewhat limited	
	Depth to saturated zone	1.00	Too acid	0.14
			Low adsorption	0.11
	Slow water movement	0.99	Too steep for surface application	0.08
OkA:				
Okeetee	Very limited		Very limited	
	Slow water movement	1.00	Depth to saturated zone	1.00
	Depth to saturated zone	1.00	Too acid	1.00
			Slow water movement	0.94
	Too acid	0.07		
OrA:				
Orangeburg	Very limited		Very limited	
	Slow water movement	0.99	Filtering capacity	0.99
			Too acid	0.91
			Low adsorption	0.86
OrB:				
Orangeburg	Very limited		Very limited	
	Slow water movement	0.99	Filtering capacity	0.99
			Too acid	0.91
			Low adsorption	0.79
OsB2:				
Orangeburg	Very limited		Somewhat limited	
	Slow water movement	0.99	Too acid	0.91
			Low adsorption	0.54
			Too steep for surface application	0.08
PaA:				
Paxville	Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Slow water movement	0.99	Too acid	1.00
			Filtering capacity	0.99
	Flooding	0.60		

Agricultural Disposal of Wastewater by Rapid Infiltration and Slow Rate Treatment—Continued

Map symbol and soil name	Rapid infiltration of wastewater		Slow rate treatment of wastewater	
	Rating class and limiting features	Value	Rating class and limiting features	Value
PeA, PeB:				
Pelion	Very limited		Very limited	
	Slow water movement	1.00	Too acid	1.00
	Depth to saturated zone	0.99	Filtering capacity	0.99
	Too acid	0.31	Depth to saturated zone	0.99
PtD:				
Pits	Not rated		Not rated	
Udorthents	Not rated		Not rated	
RaA:				
Rains	Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Slow water movement	0.99	Too acid	0.99
	Too acid	0.14		
SmA:				
Smithboro	Very limited		Very limited	
	Slow water movement	1.00	Depth to saturated zone	1.00
	Depth to saturated zone	1.00	Slow water movement	0.94
	Too acid	0.14	Too acid	0.91
StA:				
State	Very limited		Very limited	
	Depth to saturated zone	1.00	Filtering capacity	0.99
	Slow water movement	0.99	Too acid	0.99
	Too acid	0.01	Depth to saturated zone	0.08
Eunola	Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Slow water movement	0.99	Too acid	0.96
	Too acid	0.03	Low adsorption	0.04
ThA:				
Thursa	Very limited		Somewhat limited	
	Slow water movement	0.99	Low adsorption	0.84
			Too acid	0.31
ThB:				
Thursa	Very limited		Somewhat limited	
	Slow water movement	0.99	Low adsorption	0.95
	Too acid	0.14	Too acid	0.55

Agricultural Disposal of Wastewater by Rapid Infiltration and Slow Rate Treatment—Continued

Map symbol and soil name	Rapid infiltration of wastewater		Slow rate treatment of wastewater	
	Rating class and limiting features	Value	Rating class and limiting features	Value
TrB:				
Troup	Very limited		Very limited	
	Slow water movement	0.99	Filtering capacity	0.99
	Too acid	0.03	Too acid	0.91
			Low adsorption	0.01
TrC:				
Troup	Very limited		Very limited	
	Slope	1.00	Too steep for surface application	1.00
	Slow water movement	0.99		
	Too acid	0.03	Filtering capacity	0.99
			Too acid	0.91
UdD:				
Udorthents, refuse substratum	Not rated		Not rated	
Pits	Not rated		Not rated	
VaC:				
Vaucluse	Very limited		Very limited	
	Slope	1.00	Too steep for surface application	1.00
	Slow water movement	0.99		
	Too acid	0.14	Too acid	1.00
			Filtering capacity	0.99
WaB:				
Wagram	Very limited		Very limited	
	Slow water movement	0.99	Filtering capacity	0.99
			Too acid	0.91
			Low adsorption	0.03

Forestland Productivity

Map symbol and soil name	Potential productivity: Common trees	Site index	Volume of wood fiber	Trees to manage
			cu ft/ac	
AaB:				
Ailey-------------------	loblolly pine-------	87	125	longleaf pine,
	longleaf pine-------	60	65	loblolly pine
Barnwell----------------	loblolly pine-------	88	110	loblolly pine
	longleaf pine-------	60	65	
AcC:				
Ailey-------------------	loblolly pine-------	87	125	longleaf pine,
	longleaf pine-------	60	65	loblolly pine
Troup-------------------	loblolly pine-------	79	108	loblolly pine,
	longleaf pine-------	66	70	longleaf pine
Vaucluse----------------	loblolly pine-------	76	100	loblolly pine
	shortleaf pine------	56	86	
	longleaf pine-------	65	72	
AeD:				
Ailey-------------------	loblolly pine-------	87	125	loblolly pine,
	longleaf pine-------	60	56	longleaf pine
Vaucluse----------------	loblolly pine-------	76	100	loblolly pine
	shortleaf pine------	56	86	
	longleaf pine-------	65	72	
Troup-------------------	loblolly pine-------	79	108	loblolly pine,
	longleaf pine-------	66	70	longleaf pine
AgB:				
Alaga-------------------	loblolly pine-------	68	90	loblolly pine,
	longleaf pine-------	65	72	longleaf pine
AoB:				
Alaga-------------------	loblolly pine-------	68	90	longleaf pine,
	longleaf pine-------	65	72	loblolly pine
Lucknow-----------------	loblolly pine-------	85	120	loblolly pine,
	longleaf pine-------	70	79	longleaf pine
ApB, ApD:				
Alpin-------------------	loblolly pine-------	75	101	longleaf pine,
	longleaf pine-------	64	65	loblolly pine
AuB:				
Autryville--------------	loblolly pine-------	74	100	loblolly pine,
	longleaf pine-------	60	56	longleaf pine
BaB:				
Barnwell----------------	loblolly pine-------	88	110	loblolly pine
	longleaf pine-------	60	56	
BbB2:				
Barnwell----------------	loblolly pine-------	88	110	loblolly pine
	longleaf pine-------	60	56	
BcC:				
Barnwell----------------	loblolly pine-------	88	110	loblolly pine
	longleaf pine-------	60	56	

Forestland Productivity—Continued

Map symbol and soil name	Potential productivity: Common trees	Site index	Volume of wood fiber	Trees to manage
			cu ft/ac	
Cowarts	longleaf pine	55	45	loblolly pine, longleaf pine
	loblolly pine	58	62	
Troup	loblolly pine	79	108	loblolly pine, longleaf pine
	longleaf pine	66	70	
BoB:				
Bonneau	loblolly pine	89	129	loblolly pine, longleaf pine
	longleaf pine	73	86	
BuA:				
Butters	loblolly pine	71	3	loblolly pine, longleaf pine
	longleaf pine	66	72	
CaB:				
Candor	longleaf pine	58	52	longleaf pine, loblolly pine
	loblolly pine	79	108	
CcA:				
Chastain	sweetgum	98	132	baldcypress, sweetgum
	baldcypress	100	150	
Chewacla	yellow-poplar	96	100	yellow-poplar, loblolly pine, sweetgum, American sycamore
	loblolly pine	95	142	
	sweetgum	93	116	
	water oak	80	62	
ChA:				
Chewacla	yellow-poplar	96	100	yellow-poplar, loblolly pine, sweetgum, American sycamore
	loblolly pine	95	142	
	sweetgum	93	116	
	water oak	80	62	
Chastain	sweetgum	98	132	baldcypress, sweetgum
	baldcypress	100	150	
CwD:				
Cowarts	longleaf pine	55	45	loblolly pine, longleaf pine
	loblolly pine	88	110	
CxA:				
Coxville	loblolly pine	91	133	loblolly pine, sweetgum
	yellow-poplar	86	82	
	sweetgum	84	90	
DaA:				
Dorovan	swamp tupelo	100	150	Atlantic white cedar, baldcypress, swamp tupelo
	baldcypress	100	150	
DoA:				
Dothan	loblolly pine	86	110	loblolly pine, longleaf pine
	longleaf pine	73	86	
DoB:				
Dothan	loblolly pine	86	110	loblolly pine, longleaf pine
	longleaf pine	73	86	

Forestland Productivity—Continued

Map symbol and soil name	Potential productivity: Common trees	Site index	Volume of wood fiber	Trees to manage
			cu ft/ac	
DtB2:				
Dothan------------------	loblolly pine-------	86	110	loblolly pine, longleaf pine
	longleaf pine-------	73	86	
EuA:				
Eunola------------------	loblolly pine-------	90	131	loblolly pine, sweetgum
FaA, FaB:				
Faceville---------------	loblolly pine-------	82	114	loblolly pine
	longleaf pine-------	73	86	
FbB2:				
Faceville---------------	loblolly pine-------	82	114	loblolly pine
	longleaf pine-------	73	86	
FoB:				
Foxworth----------------	loblolly pine-------	80	110	loblolly pine, longleaf pine
	longleaf pine-------	65	72	
FuB:				
Fuquay------------------	loblolly pine-------	78	114	longleaf pine
	longleaf pine-------	65	72	
GoA:				
Goldsboro---------------	loblolly pine-------	90	129	loblolly pine
	longleaf pine-------	73	86	
JhA:				
Johns-------------------	loblolly pine-------	96	145	loblolly pine
	longleaf pine-------	61	57	
JoA:				
Johnston----------------	sweetgum------------	94	119	green ash, loblolly pine, sweetgum, baldcypress
	yellow-poplar-------	94	97	
JzA:				
Johnston----------------	sweetgum------------	94	119	green ash, loblolly pine, sweetgum, baldcypress
	yellow-poplar-------	94	97	
Mouzon------------------	sweetgum------------	94	119	sweetgum, water oak
KaA:				
Kalmia------------------	loblolly pine-------	86	110	loblolly pine, cherrybark oak, yellow-poplar
LaB, LaD:				
Lakeland----------------	loblolly pine-------	75	100	loblolly pine, longleaf pine
	longleaf pine-------	60	57	
LbB:				
Lucknow-----------------	loblolly pine-------	85	120	loblolly pine, longleaf pine
	longleaf pine-------	70	79	
LcB:				
Lucy--------------------	loblolly pine-------	78	107	loblolly pine, longleaf pine
	longleaf pine-------	65	72	

Forestland Productivity—Continued

Map symbol and soil name	Potential productivity: Common trees	Site index	Volume of wood fiber	Trees to manage
			cu ft/ac	
LuA:				
Lumbee	loblolly pine	86	110	loblolly pine, sweetgum
LyA:				
Lynchburg	loblolly pine	86	123	loblolly pine, sweetgum
	longleaf pine	72	83	
MaA, MaB:				
Marvyn	loblolly pine	71	95	loblolly pine, longleaf pine
	longleaf pine	55	45	
MeA:				
Meggett	swamp chestnut oak	104	150	loblolly pine
	pond pine	75	100	
MyA:				
Myatt	loblolly pine	98	143	American sycamore, loblolly pine, sweetgum
Paxville	loblolly pine	96	129	American sycamore, loblolly pine, water tupelo
	water oak	90	86	
NaB2:				
Nankin	longleaf pine	80	110	loblolly pine
	loblolly pine	86	110	
NbC, NbD:				
Nankin	longleaf pine	80	110	loblolly pine
	loblolly pine	86	110	
Lucy	loblolly pine	78	107	loblolly pine, longleaf pine
	longleaf pine	65	72	
NeB:				
Noboco	loblolly pine	90	131	loblolly pine
	longleaf pine	73	86	
NmB2:				
Noboco	loblolly pine	90	131	loblolly pine
	longleaf pine	73	86	
NnA:				
Noboco	loblolly pine	90	131	loblolly pine
	longleaf pine	73	86	
Goldsboro	loblolly pine	90	129	loblolly pine
	longleaf pine	73	86	
NoA, NoB:				
Norfolk	loblolly pine	81	112	loblolly pine, longleaf pine
	longleaf pine	65	72	

Forestland Productivity—Continued

Map symbol and soil name	Potential productivity: Common trees	Site index	Volume of wood fiber	Trees to manage
			cu ft/ac	
OkA:				
Okeetee	loblolly pine	94	143	American sycamore, loblolly pine, longleaf pine, shortleaf pine, sweetgum, yellow-poplar
	longleaf pine	73	86	
OrA:				
Orangeburg	loblolly pine	88	110	loblolly pine, longleaf pine
	longleaf pine	73	86	
OrB:				
Orangeburg	loblolly pine	80	110	loblolly pine, longleaf pine
	longleaf pine	73	86	
OsB2:				
Orangeburg	loblolly pine	80	110	loblolly pine, longleaf pine
	longleaf pine	73	86	
PaA:				
Paxville	loblolly pine	96	129	American sycamore, loblolly pine, water tupelo
	water oak	90	86	
PeA, PeB:				
Pelion	loblolly pine	84	118	loblolly pine
PtD:				
Pits	---	---	---	---
Udorthents	---	---	---	---
RaA:				
Rains	loblolly pine	103	161	loblolly pine, sweetgum, longleaf pine
	longleaf pine	65	72	
SmA:				
Smithboro	sweetgum	109	170	loblolly pine, sweetgum
	loblolly pine	106	168	
StA:				
State	loblolly pine	94	143	loblolly pine
Eunola	loblolly pine	90	131	loblolly pine, sweetgum
ThA:				
Thursa	loblolly pine	88	110	loblolly pine, longleaf pine
	longleaf pine	73	86	
ThB:				
Thursa	loblolly pine	80	110	loblolly pine, longleaf pine
	longleaf pine	73	86	
TrB, TrC:				
Troup	loblolly pine	79	108	loblolly pine, longleaf pine
	longleaf pine	66	70	

Forestland Productivity—Continued

Map symbol and soil name	Potential productivity: Common trees	Site index	Volume of wood fiber	Trees to manage
			cu ft/ac	
UdD:				
Udorthents, refuse substratum	---	---	---	---
Pits	---	---	---	---
VaC:				
Vaucluse	loblolly pine	76	100	loblolly pine
	shortleaf pine	56	86	
	longleaf pine	65	72	
WaB:				
Wagram	loblolly pine	80	110	loblolly pine, longleaf pine
	longleaf pine	59	54	

Haul Roads, Log Landings, and Soil Rutting on Forestland

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. See text for further explanation of ratings in this table.)

Map symbol and soil name	Limitations affecting construction of haul roads and log landings: Rating class and limiting features	Value	Suitability for log landings: Rating class and limiting features	Value	Soil rutting hazard: Rating class and limiting features	Value
AaB:						
Ailey	Slight		Well suited		Moderate	
					Low strength	0.50
Barnwell	Moderate		Well suited		Moderate	
	Stickiness/slope	0.50			Low strength	0.50
AcC:						
Ailey	Slight		Moderately suited		Moderate	
			Slope	0.50	Low strength	0.50
Troup	Moderate		Moderately suited		Moderate	
	Sandiness	0.50	Slope	0.50	Low strength	0.50
			Sandiness	0.50		
Vaucluse	Slight		Moderately suited		Moderate	
			Slope	0.50	Low strength	0.50
AeD:						
Ailey	Slight		Moderately suited		Moderate	
			Slope	0.50	Low strength	0.50
Vaucluse	Slight		Moderately suited		Moderate	
			Slope	0.50	Low strength	0.50
Troup	Moderate		Moderately suited		Moderate	
	Sandiness	0.50	Slope	0.50	Low strength	0.50
			Sandiness	0.50		
AgB:						
Alaga	Moderate		Moderately suited		Moderate	
	Sandiness	0.50	Sandiness	0.50	Low strength	0.50
AoB:						
Alaga	Moderate		Moderately suited		Moderate	
	Sandiness	0.50	Sandiness	0.50	Low strength	0.50
Lucknow	Moderate		Moderately suited		Moderate	
	Sandiness	0.50	Sandiness	0.50	Low strength	0.50
ApB:						
Alpin	Moderate		Moderately suited		Moderate	
	Sandiness	0.50	Sandiness	0.50	Low strength	0.50
ApD:						
Alpin	Moderate		Moderately suited		Moderate	
	Sandiness	0.50	Slope	0.50	Low strength	0.50
			Sandiness	0.50		
AuB:						
Autryville	Moderate		Moderately suited		Moderate	
	Sandiness	0.50	Sandiness	0.50	Low strength	0.50

Haul Roads, Log Landings, and Soil Rutting on Forestland—Continued

Map symbol and soil name	Limitations affecting construction of haul roads and log landings		Suitability for log landings		Soil rutting hazard	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
BaB:						
Barnwell	Moderate		Well suited		Moderate	
	Stickiness/slope	0.50			Low strength	0.50
BbB2:						
Barnwell	Slight		Well suited		Moderate	
					Low strength	0.50
BcC:						
Barnwell	Moderate		Moderately suited		Moderate	
	Stickiness/slope	0.50	Slope	0.50	Low strength	0.50
Cowarts	Slight		Moderately suited		Moderate	
			Slope	0.50	Low strength	0.50
Troup	Moderate		Moderately suited		Moderate	
	Sandiness	0.50	Slope	0.50	Low strength	0.50
			Sandiness	0.50		
BoB:						
Bonneau	Moderate		Moderately suited		Moderate	
	Sandiness	0.50	Sandiness	0.50	Low strength	0.50
BuA:						
Butters	Slight		Well suited		Moderate	
					Low strength	0.50
CaB:						
Candor	Moderate		Moderately suited		Moderate	
	Sandiness	0.50	Sandiness	0.50	Low strength	0.50
CcA:						
Chastain	Severe		Poorly suited		Severe	
	Flooding	1.00	Flooding	1.00	Low strength	1.00
	Wetness	1.00	Wetness	1.00	Wetness	0.50
	Low strength	0.50	Low strength	0.50		
Chewacla	Severe		Poorly suited		Severe	
	Flooding	1.00	Flooding	1.00	Low strength	1.00
	Low strength	0.50	Wetness	1.00		
			Low strength	0.50		
ChA:						
Chewacla	Severe		Poorly suited		Severe	
	Flooding	1.00	Flooding	1.00	Low strength	1.00
	Low strength	0.50	Wetness	1.00		
			Low strength	0.50		
Chastain	Severe		Poorly suited		Severe	
	Flooding	1.00	Flooding	1.00	Low strength	1.00
	Wetness	1.00	Wetness	1.00	Wetness	0.50
	Low strength	0.50	Low strength	0.50		
CwD:						
Cowarts	Slight		Moderately suited		Moderate	
			Slope	0.50	Low strength	0.50

Haul Roads, Log Landings, and Soil Rutting on Forestland—Continued

Map symbol and soil name	Limitations affecting construction of haul roads and log landings		Suitability for log landings		Soil rutting hazard	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
CxA:						
Coxville------------	Slight		Poorly suited		Moderate	
			Wetness	1.00	Low strength	0.50
DaA:						
Dorovan-------------	Severe		Poorly suited		Severe	
	Flooding	1.00	Flooding	1.00	Low strength	1.00
	Wetness	1.00	Wetness	1.00	Wetness	0.50
	Low strength	0.50	Low strength	0.50		
DoA, DoB:						
Dothan--------------	Slight		Well suited		Moderate	
					Low strength	0.50
DtB2:						
Dothan--------------	Slight		Well suited		Moderate	
					Low strength	0.50
EuA:						
Eunola--------------	Slight		Moderately suited		Moderate	
			Wetness	0.50	Low strength	0.50
FaA, FaB:						
Faceville-----------	Slight		Well suited		Moderate	
					Low strength	0.50
FbB2:						
Faceville-----------	Moderate		Moderately suited		Severe	
	Low strength	0.50	Low strength	0.50	Low strength	1.00
FoB:						
Foxworth------------	Moderate		Moderately suited		Moderate	
	Sandiness	0.50	Sandiness	0.50	Low strength	0.50
FuB:						
Fuquay--------------	Moderate		Moderately suited		Moderate	
	Sandiness	0.50	Sandiness	0.50	Low strength	0.50
GoA:						
Goldsboro-----------	Slight		Moderately suited		Moderate	
			Wetness	0.50	Low strength	0.50
JhA:						
Johns---------------	Moderate		Moderately suited		Moderate	
	Sandiness	0.50	Sandiness	0.50	Low strength	0.50
			Wetness	0.50		
JoA:						
Johnston------------	Severe		Poorly suited		Severe	
	Flooding	1.00	Flooding	1.00	Low strength	1.00
	Wetness	1.00			Wetness	0.50
JzA:						
Johnston------------	Severe		Poorly suited		Severe	
	Flooding	1.00	Flooding	1.00	Low strength	1.00
	Wetness	1.00			Wetness	0.50

Haul Roads, Log Landings, and Soil Rutting on Forestland—Continued

Map symbol and soil name	Limitations affecting construction of haul roads and log landings: Rating class and limiting features	Value	Suitability for log landings: Rating class and limiting features	Value	Soil rutting hazard: Rating class and limiting features	Value
Mouzon	Severe		Poorly suited		Moderate	
	Flooding	1.00	Flooding	1.00	Low strength	0.50
	Sandiness	0.50	Wetness	1.00		
			Sandiness	0.50		
KaA:						
Kalmia	Moderate		Moderately suited		Moderate	
	Sandiness	0.50	Sandiness	0.50	Low strength	0.50
LaB:						
Lakeland	Moderate		Moderately suited		Moderate	
	Sandiness	0.50	Sandiness	0.50	Low strength	0.50
LaD:						
Lakeland	Moderate		Moderately suited		Moderate	
	Sandiness	0.50	Slope	0.50	Low strength	0.50
			Sandiness	0.50		
LbB:						
Lucknow	Moderate		Moderately suited		Moderate	
	Sandiness	0.50	Sandiness	0.50	Low strength	0.50
LcB:						
Lucy	Moderate		Moderately suited		Moderate	
	Sandiness	0.50	Sandiness	0.50	Low strength	0.50
LuA:						
Lumbee	Slight		Poorly suited		Moderate	
			Wetness	1.00	Low strength	0.50
LyA:						
Lynchburg	Slight		Moderately suited		Moderate	
			Wetness	0.50	Low strength	0.50
MaA, MaB:						
Marvyn	Moderate		Moderately suited		Moderate	
	Sandiness	0.50	Sandiness	0.50	Low strength	0.50
MeA:						
Meggett	Severe		Poorly suited		Moderate	
	Flooding	1.00	Flooding	1.00	Low strength	0.50
	Low strength	0.50	Wetness	1.00		
MyA:						
Myatt	Severe		Poorly suited		Moderate	
	Flooding	1.00	Flooding	1.00	Low strength	0.50
			Wetness	1.00		
Paxville	Severe		Poorly suited		Moderate	
	Flooding	1.00	Flooding	1.00	Low strength	0.50
			Wetness	1.00		
NaB2:						
Nankin	Moderate		Well suited		Moderate	
	Low strength	0.50			Low strength	0.50
NbC, NbD:						
Nankin	Slight		Moderately suited		Moderate	
			Slope	0.50	Low strength	0.50

Haul Roads, Log Landings, and Soil Rutting on Forestland—Continued

Map symbol and soil name	Limitations affecting construction of haul roads and log landings		Suitability for log landings		Soil rutting hazard	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
Lucy	Moderate		Moderately suited		Moderate	
	Sandiness	0.50	Slope	0.50	Low strength	0.50
			Sandiness	0.50		
NeB:						
Noboco	Slight		Well suited		Moderate	
					Low strength	0.50
NmB2:						
Noboco	Slight		Well suited		Moderate	
					Low strength	0.50
NnA:						
Noboco	Slight		Well suited		Moderate	
					Low strength	0.50
Goldsboro	Slight		Moderately suited		Moderate	
			Wetness	0.50	Low strength	0.50
NoA, NoB:						
Norfolk	Slight		Well suited		Moderate	
					Low strength	0.50
OkA:						
Okeetee	Slight		Poorly suited		Moderate	
			Wetness	1.00	Low strength	0.50
OrA, OrB:						
Orangeburg	Slight		Well suited		Moderate	
					Low strength	0.50
OsB2:						
Orangeburg	Slight		Well suited		Moderate	
					Low strength	0.50
PaA:						
Paxville	Severe		Poorly suited		Moderate	
	Flooding	1.00	Flooding	1.00	Low strength	0.50
			Wetness	1.00		
PeA, PeB:						
Pelion	Slight		Well suited		Moderate	
					Low strength	0.50
PtD:						
Pits	Not rated		Not rated		Not rated	
Udorthents	Not rated		Not rated		Not rated	
RaA:						
Rains	Slight		Poorly suited		Moderate	
			Wetness	1.00	Low strength	0.50
SmA:						
Smithboro	Moderate		Poorly suited		Moderate	
	Low strength	0.50	Wetness	1.00	Low strength	0.50

Haul Roads, Log Landings, and Soil Rutting on Forestland—Continued

Map symbol and soil name	Limitations affecting construction of haul roads and log landings: Rating class and limiting features	Value	Suitability for log landings: Rating class and limiting features	Value	Soil rutting hazard: Rating class and limiting features	Value
StA:						
State----------------	Moderate		Moderately suited		Moderate	
	Sandiness	0.50	Sandiness	0.50	Low strength	0.50
Eunola---------------	Slight		Moderately suited		Moderate	
			Wetness	0.50	Low strength	0.50
ThA, ThB:						
Thursa---------------	Moderate		Well suited		Moderate	
	Stickiness/slope	0.50			Low strength	0.50
TrB:						
Troup----------------	Moderate		Moderately suited		Moderate	
	Sandiness	0.50	Sandiness	0.50	Low strength	0.50
TrC:						
Troup----------------	Moderate		Moderately suited		Moderate	
	Sandiness	0.50	Slope	0.50	Low strength	0.50
			Sandiness	0.50		
UdD:						
Udorthents, refuse substratum---------	Not rated		Not rated		Not rated	
Pits-----------------	Not rated		Not rated		Not rated	
VaC:						
Vaucluse-------------	Slight		Moderately suited		Moderate	
			Slope	0.50	Low strength	0.50
WaB:						
Wagram---------------	Moderate		Moderately suited		Moderate	
	Sandiness	0.50	Sandiness	0.50	Low strength	0.50

Hazard of Erosion and Suitability for Roads on Forestland

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. See text for further explanation of ratings in this table.)

Map symbol and soil name	Hazard of off-road or off-trail erosion		Hazard of erosion on roads and trails		Suitability for roads (natural surface)	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
AaB:						
Ailey	Slight		Slight		Well suited	
Barnwell	Slight		Slight		Well suited	
AcC:						
Ailey	Slight		Moderate		Moderately suited	
			Slope/erodibility	0.50	Slope	0.50
Troup	Slight		Moderate		Moderately suited	
			Slope/erodibility	0.50	Slope	0.50
					Sandiness	0.50
Vaucluse	Slight		Moderate		Moderately suited	
			Slope/erodibility	0.50	Slope	0.50
AeD:						
Ailey	Slight		Moderate		Moderately suited	
			Slope/erodibility	0.50	Slope	0.50
Vaucluse	Slight		Moderate		Moderately suited	
			Slope/erodibility	0.50	Slope	0.50
Troup	Slight		Moderate		Moderately suited	
			Slope/erodibility	0.50	Slope	0.50
					Sandiness	0.50
AgB:						
Alaga	Slight		Slight		Moderately suited	
					Sandiness	0.50
AoB:						
Alaga	Slight		Slight		Moderately suited	
					Sandiness	0.50
Lucknow	Slight		Slight		Moderately suited	
					Sandiness	0.50
ApB:						
Alpin	Slight		Slight		Moderately suited	
					Sandiness	0.50
ApD:						
Alpin	Slight		Moderate		Moderately suited	
			Slope/erodibility	0.50	Slope	0.50
					Sandiness	0.50
AuB:						
Autryville	Slight		Slight		Moderately suited	
					Sandiness	0.50
BaB:						
Barnwell	Slight		Slight		Well suited	

Hazard of Erosion and Suitability for Roads on Forestland—Continued

Map symbol and soil name	Hazard of off-road or off-trail erosion: Rating class and limiting features	Value	Hazard of erosion on roads and trails: Rating class and limiting features	Value	Suitability for roads (natural surface): Rating class and limiting features	Value
BbB2:						
Barnwell	Slight		Slight		Well suited	
BcC:						
Barnwell	Slight		Moderate		Moderately suited	
			Slope/erodibility	0.50	Slope	0.50
Cowarts	Slight		Moderate		Moderately suited	
			Slope/erodibility	0.50	Slope	0.50
Troup	Slight		Moderate		Moderately suited	
			Slope/erodibility	0.50	Slope	0.50
					Sandiness	0.50
BoB:						
Bonneau	Slight		Slight		Moderately suited	
					Sandiness	0.50
BuA:						
Butters	Slight		Slight		Well suited	
CaB:						
Candor	Slight		Slight		Moderately suited	
					Sandiness	0.50
CcA:						
Chastain	Slight		Slight		Poorly suited	
					Flooding	1.00
					Wetness	1.00
					Low strength	0.50
Chewacla	Slight		Slight		Poorly suited	
					Flooding	1.00
					Wetness	1.00
					Low strength	0.50
ChA:						
Chewacla	Slight		Slight		Poorly suited	
					Flooding	1.00
					Wetness	1.00
					Low strength	0.50
Chastain	Slight		Slight		Poorly suited	
					Flooding	1.00
					Wetness	1.00
					Low strength	0.50
CwD:						
Cowarts	Slight		Moderate		Moderately suited	
			Slope/erodibility	0.50	Slope	0.50
CxA:						
Coxville	Slight		Slight		Poorly suited	
					Wetness	1.00

Hazard of Erosion and Suitability for Roads on Forestland—Continued

Map symbol and soil name	Hazard of off-road or off-trail erosion		Hazard of erosion on roads and trails		Suitability for roads (natural surface)	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
DaA:						
Dorovan-------------	Very Severe		Very Severe		Poorly suited	
	Organic matter content high	1.00	Organic matter content high	1.00	Flooding	1.00
					Wetness	1.00
					Low strength	0.50
DoA, DoB:						
Dothan--------------	Slight		Slight		Well suited	
DtB2:						
Dothan--------------	Slight		Slight		Well suited	
EuA:						
Eunola--------------	Slight		Slight		Moderately suited	
					Wetness	0.50
FaA, FaB:						
Faceville-----------	Slight		Slight		Well suited	
FbB2:						
Faceville-----------	Slight		Moderate		Moderately suited	
			Slope/erodibility	0.50	Low strength	0.50
FoB:						
Foxworth------------	Slight		Slight		Moderately suited	
					Sandiness	0.50
FuB:						
Fuquay--------------	Slight		Slight		Moderately suited	
					Sandiness	0.50
GoA:						
Goldsboro-----------	Slight		Slight		Moderately suited	
					Wetness	0.50
JhA:						
Johns---------------	Slight		Slight		Moderately suited	
					Sandiness	0.50
					Wetness	0.50
JoA:						
Johnston------------	Slight		Slight		Poorly suited	
					Flooding	1.00
JzA:						
Johnston------------	Slight		Slight		Poorly suited	
					Flooding	1.00
Mouzon--------------	Slight		Slight		Poorly suited	
					Flooding	1.00
					Wetness	1.00
					Sandiness	0.50
KaA:						
Kalmia--------------	Slight		Slight		Moderately suited	
					Sandiness	0.50

Hazard of Erosion and Suitability for Roads on Forestland—Continued

Map symbol and soil name	Hazard of off-road or off-trail erosion		Hazard of erosion on roads and trails		Suitability for roads (natural surface)	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
LaB:						
Lakeland	Slight		Slight		Moderately suited	
					Sandiness	0.50
LaD:						
Lakeland	Slight		Moderate		Moderately suited	
			Slope/erodibility	0.50	Slope	0.50
					Sandiness	0.50
LbB:						
Lucknow	Slight		Slight		Moderately suited	
					Sandiness	0.50
LcB:						
Lucy	Slight		Slight		Moderately suited	
					Sandiness	0.50
LuA:						
Lumbee	Slight		Slight		Poorly suited	
					Wetness	1.00
LyA:						
Lynchburg	Slight		Slight		Moderately suited	
					Wetness	0.50
MaA:						
Marvyn	Slight		Slight		Moderately suited	
					Sandiness	0.50
MaB:						
Marvyn	Slight		Moderate		Moderately suited	
			Slope/erodibility	0.50	Sandiness	0.50
MeA:						
Meggett	Slight		Slight		Poorly suited	
					Flooding	1.00
					Wetness	1.00
MyA:						
Myatt	Slight		Slight		Poorly suited	
					Flooding	1.00
					Wetness	1.00
Paxville	Slight		Slight		Poorly suited	
					Flooding	1.00
					Wetness	1.00
NaB2:						
Nankin	Slight		Moderate		Well suited	
			Slope/erodibility	0.50		
NbC, NbD:						
Nankin	Slight		Moderate		Moderately suited	
			Slope/erodibility	0.50	Slope	0.50
Lucy	Slight		Moderate		Moderately suited	
			Slope/erodibility	0.50	Slope	0.50
					Sandiness	0.50

Hazard of Erosion and Suitability for Roads on Forestland—Continued

Map symbol and soil name	Hazard of off-road or off-trail erosion		Hazard of erosion on roads and trails		Suitability for roads (natural surface)	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
NeB:						
Noboco	Slight		Slight		Well suited	
NmB2:						
Noboco	Slight		Slight		Well suited	
NnA:						
Noboco	Slight		Slight		Well suited	
Goldsboro	Slight		Slight		Moderately suited	
					Wetness	0.50
NoA, NoB:						
Norfolk	Slight		Slight		Well suited	
OkA:						
Okeetee	Slight		Slight		Poorly suited	
					Wetness	1.00
OrA, OrB:						
Orangeburg	Slight		Slight		Well suited	
OsB2:						
Orangeburg	Slight		Slight		Well suited	
PaA:						
Paxville	Slight		Slight		Poorly suited	
					Flooding	1.00
					Wetness	1.00
PeA, PeB:						
Pelion	Slight		Slight		Well suited	
PtD:						
Pits	Not rated		Not rated		Not rated	
Udorthents	Not rated		Not rated		Not rated	
RaA:						
Rains	Slight		Slight		Poorly suited	
					Wetness	1.00
SmA:						
Smithboro	Slight		Slight		Poorly suited	
					Wetness	1.00
StA:						
State	Slight		Slight		Moderately suited	
					Sandiness	0.50
Eunola	Slight		Slight		Moderately suited	
					Wetness	0.50
ThA, ThB:						
Thursa	Slight		Slight		Well suited	

Hazard of Erosion and Suitability for Roads on Forestland—Continued

Map symbol and soil name	Hazard of off-road or off-trail erosion: Rating class and limiting features	Value	Hazard of erosion on roads and trails: Rating class and limiting features	Value	Suitability for roads (natural surface): Rating class and limiting features	Value
TrB:						
Troup	Slight		Slight		Moderately suited	
					Sandiness	0.50
TrC:						
Troup	Slight		Moderate		Moderately suited	
			Slope/erodibility	0.50	Slope	0.50
					Sandiness	0.50
UdD:						
Udorthents, refuse substratum	Not rated		Not rated		Not rated	
Pits	Not rated		Not rated		Not rated	
VaC:						
Vaucluse	Slight		Moderate		Moderately suited	
			Slope/erodibility	0.50	Slope	0.50
WaB:						
Wagram	Slight		Slight		Moderately suited	
					Sandiness	0.50

Forestland Planting and Harvesting

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. See text for further explanation of ratings in this table.)

Map symbol and soil name	Suitability for hand planting		Suitability for mechanical planting		Suitability for use of harvesting equipment	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
AaB:						
Ailey---------------	Well suited		Well suited		Well suited	
Barnwell------------	Moderately suited		Moderately suited		Well suited	
	Stickiness; high plasticity index	0.50	Stickiness; high plasticity index	0.50		
AcC:						
Ailey---------------	Well suited		Moderately suited		Well suited	
			Slope	0.50		
Troup---------------	Moderately suited		Moderately suited		Moderately suited	
	Sandiness	0.50	Slope	0.50	Sandiness	0.50
			Sandiness	0.50		
Vaucluse------------	Well suited		Moderately suited		Well suited	
			Slope	0.50		
AeD:						
Ailey---------------	Well suited		Moderately suited		Well suited	
			Slope	0.50		
Vaucluse------------	Well suited		Moderately suited		Well suited	
			Slope	0.50		
Troup---------------	Moderately suited		Moderately suited		Moderately suited	
	Sandiness	0.50	Slope	0.50	Sandiness	0.50
			Sandiness	0.50		
AgB:						
Alaga---------------	Moderately suited		Moderately suited		Moderately suited	
	Sandiness	0.50	Sandiness	0.50	Sandiness	0.50
AoB:						
Alaga---------------	Moderately suited		Moderately suited		Moderately suited	
	Sandiness	0.50	Sandiness	0.50	Sandiness	0.50
Lucknow-------------	Moderately suited		Moderately suited		Moderately suited	
	Sandiness	0.50	Sandiness	0.50	Sandiness	0.50
ApB:						
Alpin---------------	Moderately suited		Moderately suited		Moderately suited	
	Sandiness	0.50	Sandiness	0.50	Sandiness	0.50
ApD:						
Alpin---------------	Moderately suited		Moderately suited		Moderately suited	
	Sandiness	0.50	Slope	0.50	Sandiness	0.50
			Sandiness	0.50		
AuB:						
Autryville----------	Moderately suited		Moderately suited		Moderately suited	
	Sandiness	0.50	Sandiness	0.50	Sandiness	0.50

Forestland Planting and Harvesting—Continued

Map symbol and soil name	Suitability for hand planting: Rating class and limiting features	Value	Suitability for mechanical planting: Rating class and limiting features	Value	Suitability for use of harvesting equipment: Rating class and limiting features	Value
BaB:						
Barnwell	Moderately suited		Moderately suited		Well suited	
	Stickiness; high plasticity index	0.50	Stickiness; high plasticity index	0.50		
BbB2:						
Barnwell	Moderately suited		Moderately suited		Well suited	
	Stickiness; high plasticity index	0.50	Stickiness; high plasticity index	0.50		
BcC:						
Barnwell	Moderately suited		Moderately suited		Well suited	
	Stickiness; high plasticity index	0.50	Slope	0.50		
			Stickiness; high plasticity index	0.50		
Cowarts	Well suited		Moderately suited		Well suited	
			Slope	0.50		
Troup	Moderately suited		Moderately suited		Moderately suited	
	Sandiness	0.50	Slope	0.50	Sandiness	0.50
			Sandiness	0.50		
BoB:						
Bonneau	Moderately suited		Moderately suited		Moderately suited	
	Sandiness	0.50	Sandiness	0.50	Sandiness	0.50
BuA:						
Butters	Moderately suited		Moderately suited		Well suited	
	Sandiness	0.50	Sandiness	0.50		
CaB:						
Candor	Moderately suited		Moderately suited		Moderately suited	
	Sandiness	0.50	Sandiness	0.50	Sandiness	0.50
CcA:						
Chastain	Moderately suited		Moderately suited		Poorly suited	
	Stickiness; high plasticity index	0.50	Stickiness; high plasticity index	0.50	Wetness	1.00
	Wetness	0.50	Wetness	0.50	Low strength	0.50
Chewacla	Well suited		Well suited		Moderately suited	
					Low strength	0.50
ChA:						
Chewacla	Well suited		Well suited		Moderately suited	
					Low strength	0.50
Chastain	Moderately suited		Moderately suited		Poorly suited	
	Stickiness; high plasticity index	0.50	Stickiness; high plasticity index	0.50	Wetness	1.00
	Wetness	0.50	Wetness	0.50	Low strength	0.50
CwD:						
Cowarts	Well suited		Moderately suited		Well suited	
			Slope	0.50		

Forestland Planting and Harvesting—Continued

Map symbol and soil name	Suitability for hand planting		Suitability for mechanical planting		Suitability for use of harvesting equipment	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
CxA:						
Coxville------------	Poorly suited		Poorly suited		Well suited	
	Stickiness; high plasticity index	0.75	Stickiness; high plasticity index	0.75		
DaA:						
Dorovan-------------	Moderately suited		Poorly suited		Poorly suited	
	Wetness	0.50	Wetness	0.75	Wetness	1.00
	Stickiness; high plasticity index	0.50	Stickiness; high plasticity index	0.50	Low strength	0.50
DoA, DoB:						
Dothan--------------	Well suited		Well suited		Well suited	
DtB2:						
Dothan--------------	Well suited		Well suited		Well suited	
EuA:						
Eunola--------------	Well suited		Well suited		Well suited	
FaA, FaB:						
Faceville-----------	Well suited		Well suited		Well suited	
FbB2:						
Faceville-----------	Well suited		Well suited		Moderately suited	
					Low strength	0.50
FoB:						
Foxworth------------	Moderately suited		Moderately suited		Moderately suited	
	Sandiness	0.50	Sandiness	0.50	Sandiness	0.50
FuB:						
Fuquay--------------	Moderately suited		Moderately suited		Moderately suited	
	Sandiness	0.50	Sandiness	0.50	Sandiness	0.50
GoA:						
Goldsboro-----------	Well suited		Well suited		Well suited	
JhA:						
Johns---------------	Moderately suited		Moderately suited		Moderately suited	
	Sandiness	0.50	Sandiness	0.50	Sandiness	0.50
JoA:						
Johnston------------	Moderately suited		Poorly suited		Poorly suited	
	Wetness	0.50	Wetness	0.75	Wetness	1.00
JzA:						
Johnston------------	Moderately suited		Poorly suited		Poorly suited	
	Wetness	0.50	Wetness	0.75	Wetness	1.00
Mouzon--------------	Moderately suited		Moderately suited		Moderately suited	
	Sandiness	0.50	Sandiness	0.50	Sandiness	0.50
KaA:						
Kalmia--------------	Moderately suited		Moderately suited		Moderately suited	
	Sandiness	0.50	Sandiness	0.50	Sandiness	0.50

Forestland Planting and Harvesting—Continued

Map symbol and soil name	Suitability for hand planting: Rating class and limiting features	Value	Suitability for mechanical planting: Rating class and limiting features	Value	Suitability for use of harvesting equipment: Rating class and limiting features	Value
LaB:						
Lakeland	Moderately suited		Moderately suited		Moderately suited	
	Sandiness	0.50	Sandiness	0.50	Sandiness	0.50
LaD:						
Lakeland	Moderately suited		Moderately suited		Moderately suited	
	Sandiness	0.50	Slope	0.50	Sandiness	0.50
			Sandiness	0.50		
LbB:						
Lucknow	Moderately suited		Moderately suited		Moderately suited	
	Sandiness	0.50	Sandiness	0.50	Sandiness	0.50
LcB:						
Lucy	Moderately suited		Moderately suited		Moderately suited	
	Sandiness	0.50	Sandiness	0.50	Sandiness	0.50
LuA:						
Lumbee	Well suited		Well suited		Well suited	
LyA:						
Lynchburg	Well suited		Well suited		Well suited	
MaA, MaB:						
Marvyn	Moderately suited		Moderately suited		Moderately suited	
	Stickiness; high plasticity index	0.50	Stickiness; high plasticity index	0.50	Sandiness	0.50
	Sandiness	0.50	Sandiness	0.50		
MeA:						
Meggett	Poorly suited		Poorly suited		Well suited	
	Stickiness; high plasticity index	0.75	Stickiness; high plasticity index	0.75		
MyA:						
Myatt	Well suited		Well suited		Well suited	
Paxville	Well suited		Well suited		Well suited	
NaB2:						
Nankin	Well suited		Well suited		Well suited	
NbC, NbD:						
Nankin	Well suited		Moderately suited		Well suited	
			Slope	0.50		
Lucy	Moderately suited		Moderately suited		Moderately suited	
	Sandiness	0.50	Slope	0.50	Sandiness	0.50
			Sandiness	0.50		
NeB:						
Noboco	Well suited		Well suited		Well suited	
NmB2:						
Noboco	Well suited		Well suited		Well suited	
NnA:						
Noboco	Well suited		Well suited		Well suited	

Forestland Planting and Harvesting—Continued

Map symbol and soil name	Suitability for hand planting		Suitability for mechanical planting		Suitability for use of harvesting equipment	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
Goldsboro----------	Well suited		Well suited		Well suited	
NoA, NoB:						
Norfolk------------	Well suited		Well suited		Well suited	
OkA:						
Okeetee------------	Poorly suited		Poorly suited		Well suited	
	Stickiness; high plasticity index	0.75	Stickiness; high plasticity index	0.75		
OrA, OrB:						
Orangeburg---------	Moderately suited		Moderately suited		Well suited	
	Stickiness; high plasticity index	0.50	Stickiness; high plasticity index	0.50		
OsB2:						
Orangeburg---------	Moderately suited		Moderately suited		Well suited	
	Stickiness; high plasticity index	0.50	Stickiness; high plasticity index	0.50		
PaA:						
Paxville-----------	Well suited		Well suited		Well suited	
PeA, PeB:						
Pelion-------------	Moderately suited		Moderately suited		Well suited	
	Stickiness; high plasticity index	0.50	Stickiness; high plasticity index	0.50		
PtD:						
Pits---------------	Not rated		Not rated		Not rated	
Udorthents---------	Not rated		Not rated		Not rated	
RaA:						
Rains--------------	Moderately suited		Moderately suited		Well suited	
	Stickiness; high plasticity index	0.50	Stickiness; high plasticity index	0.50		
SmA:						
Smithboro----------	Moderately suited		Moderately suited		Well suited	
	Stickiness; high plasticity index	0.50	Stickiness; high plasticity index	0.50		
StA:						
State--------------	Moderately suited		Moderately suited		Moderately suited	
	Sandiness	0.50	Sandiness	0.50	Sandiness	0.50
Eunola-------------	Well suited		Well suited		Well suited	
ThA:						
Thursa-------------	Well suited		Well suited		Well suited	
ThB:						
Thursa-------------	Moderately suited		Moderately suited		Well suited	
	Stickiness; high plasticity index	0.50	Stickiness; high plasticity index	0.50		

Forestland Planting and Harvesting—Continued

Map symbol and soil name	Suitability for hand planting: Rating class and limiting features	Value	Suitability for mechanical planting: Rating class and limiting features	Value	Suitability for use of harvesting equipment: Rating class and limiting features	Value
TrB:						
Troup	Moderately suited		Moderately suited		Moderately suited	
	Sandiness	0.50	Sandiness	0.50	Sandiness	0.50
TrC:						
Troup	Moderately suited		Moderately suited		Moderately suited	
	Sandiness	0.50	Slope	0.50	Sandiness	0.50
			Sandiness	0.50		
UdD:						
Udorthents, refuse substratum	Not rated		Not rated		Not rated	
Pits	Not rated		Not rated		Not rated	
VaC:						
Vaucluse	Well suited		Moderately suited		Well suited	
			Slope	0.50		
WaB:						
Wagram	Moderately suited		Moderately suited		Moderately suited	
	Sandiness	0.50	Sandiness	0.50	Sandiness	0.50

Forestland Site Preparation

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. See text for further explanation of ratings in this table.)

Map symbol and soil name	Suitability for mechanical site preparation (surface)		Suitability for mechanical site preparation (deep)	
	Rating class and limiting features	Value	Rating class and limiting features	Value
AaB:				
Ailey	Well suited		Well suited	
Barnwell	Well suited		Well suited	
AcC:				
Ailey	Well suited		Well suited	
Troup	Well suited		Well suited	
Vaucluse	Well suited		Well suited	
AeD:				
Ailey	Well suited		Well suited	
Vaucluse	Well suited		Well suited	
Troup	Well suited		Well suited	
AgB:				
Alaga	Well suited		Well suited	
AoB:				
Alaga	Well suited		Well suited	
Lucknow	Well suited		Well suited	
ApB, ApD:				
Alpin	Well suited		Well suited	
AuB:				
Autryville	Well suited		Well suited	
BaB:				
Barnwell	Well suited		Well suited	
BbB2:				
Barnwell	Well suited		Well suited	
BcC:				
Barnwell	Well suited		Well suited	
Cowarts	Well suited		Well suited	
Troup	Well suited		Well suited	
BoB:				
Bonneau	Well suited		Well suited	
BuA:				
Butters	Well suited		Well suited	
CaB:				
Candor	Well suited		Well suited	

Forestland Site Preparation—Continued

Map symbol and soil name	Suitability for mechanical site preparation (surface): Rating class and limiting features	Value	Suitability for mechanical site preparation (deep): Rating class and limiting features	Value
CcA:				
Chastain	Poorly suited		Unsuited	
	Wetness	0.50	Wetness	1.00
Chewacla	Well suited		Well suited	
ChA:				
Chewacla	Well suited		Well suited	
Chastain	Poorly suited		Unsuited	
	Wetness	0.50	Wetness	1.00
CwD:				
Cowarts	Well suited		Well suited	
CxA:				
Coxville	Poorly suited		Well suited	
	Stickiness; high plasticity index	0.50		
DaA:				
Dorovan	Poorly suited		Unsuited	
	Wetness	0.50	Wetness	1.00
DoA, DoB:				
Dothan	Well suited		Well suited	
DtB2:				
Dothan	Well suited		Well suited	
EuA:				
Eunola	Well suited		Well suited	
FaA, FaB:				
Faceville	Well suited		Well suited	
FbB2:				
Faceville	Well suited		Well suited	
FoB:				
Foxworth	Well suited		Well suited	
FuB:				
Fuquay	Well suited		Well suited	
GoA:				
Goldsboro	Well suited		Well suited	
JhA:				
Johns	Well suited		Well suited	
JoA:				
Johnston	Poorly suited		Unsuited	
	Wetness	0.50	Wetness	1.00
JzA:				
Johnston	Poorly suited		Unsuited	
	Wetness	0.50	Wetness	1.00
Mouzon	Well suited		Well suited	

Forestland Site Preparation—Continued

Map symbol and soil name	Suitability for mechanical site preparation (surface): Rating class and limiting features	Value	Suitability for mechanical site preparation (deep): Rating class and limiting features	Value
KaA:				
Kalmia	Well suited		Well suited	
LaB, LaD:				
Lakeland	Well suited		Well suited	
LbB:				
Lucknow	Well suited		Well suited	
LcB:				
Lucy	Well suited		Well suited	
LuA:				
Lumbee	Well suited		Well suited	
LyA:				
Lynchburg	Well suited		Well suited	
MaA, MaB:				
Marvyn	Well suited		Well suited	
MeA:				
Meggett	Poorly suited		Well suited	
	Stickiness; high plasticity index	0.50		
MyA:				
Myatt	Well suited		Well suited	
Paxville	Well suited		Well suited	
NaB2:				
Nankin	Well suited		Well suited	
NbC, NbD:				
Nankin	Well suited		Well suited	
Lucy	Well suited		Well suited	
NeB:				
Noboco	Well suited		Well suited	
NmB2:				
Noboco	Well suited		Well suited	
NnA:				
Noboco	Well suited		Well suited	
Goldsboro	Well suited		Well suited	
NoA, NoB:				
Norfolk	Well suited		Well suited	
OkA:				
Okeetee	Poorly suited		Well suited	
	Stickiness; high plasticity index	0.50		
OrA, OrB:				
Orangeburg	Well suited		Well suited	

Forestland Site Preparation—Continued

Map symbol and soil name	Suitability for mechanical site preparation (surface)		Suitability for mechanical site preparation (deep)	
	Rating class and limiting features	Value	Rating class and limiting features	Value
OsB2:				
Orangeburg	Well suited		Well suited	
PaA:				
Paxville	Well suited		Well suited	
PeA, PeB:				
Pelion	Well suited		Well suited	
PtD:				
Pits	Not rated		Not rated	
Udorthents	Not rated		Not rated	
RaA:				
Rains	Well suited		Well suited	
SmA:				
Smithboro	Well suited		Well suited	
StA:				
State	Well suited		Well suited	
Eunola	Well suited		Well suited	
ThA, ThB:				
Thursa	Well suited		Well suited	
TrB, TrC:				
Troup	Well suited		Well suited	
UdD:				
Udorthents, refuse substratum	Not rated		Not rated	
Pits	Not rated		Not rated	
VaC:				
Vaucluse	Well suited		Well suited	
WaB:				
Wagram	Well suited		Well suited	

Damage by Fire and Seedling Mortality on Forestland

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. See text for further explanation of ratings in this table.)

Map symbol and soil name	Potential for damage to soil by fire: Rating class and limiting features	Value	Potential for seedling mortality: Rating class and limiting features	Value
AaB:				
Ailey	High		Moderate	
	Texture/rock fragments	1.00	Available water	0.50
Barnwell	High		Low	
	Texture/rock fragments	1.00		
AcC:				
Ailey	High		Moderate	
	Texture/rock fragments	1.00	Available water	0.50
Troup	High		Low	
	Texture/surface depth/rock fragments	1.00		
Vaucluse	High		Moderate	
	Texture/surface depth/rock fragments	1.00	Soil reaction	0.50
AeD:				
Ailey	High		Moderate	
	Texture/rock fragments	1.00	Available water	0.50
Vaucluse	High		Moderate	
	Texture/surface depth/rock fragments	1.00	Soil reaction	0.50
Troup	High		Low	
	Texture/surface depth/rock fragments	1.00		
AgB:				
Alaga	High		Low	
	Texture/rock fragments	1.00		
AoB:				
Alaga	High		Low	
	Texture/rock fragments	1.00		
Lucknow	High		Moderate	
	Texture/rock fragments	1.00	Available water	0.50

Damage by Fire and Seedling Mortality on Forestland—Continued

Map symbol and soil name	Potential for damage to soil by fire		Potential for seedling mortality	
	Rating class and limiting features	Value	Rating class and limiting features	Value
ApB, ApD:				
Alpin	High		Moderate	
	Texture/rock fragments	1.00	Available water	0.50
AuB:				
Autryville	High		Moderate	
	Texture/rock fragments	1.00	Available water	0.50
BaB:				
Barnwell	High		Low	
	Texture/rock fragments	1.00		
BbB2:				
Barnwell	Moderate		Low	
	Texture/rock fragments	0.50		
BcC:				
Barnwell	High		Low	
	Texture/rock fragments	1.00		
Cowarts	High		Low	
	Texture/rock fragments	1.00		
Troup	High		Low	
	Texture/surface depth/rock fragments	1.00		
BoB:				
Bonneau	High		Moderate	
	Texture/rock fragments	1.00	Available water	0.50
BuA:				
Butters	High		Low	
	Texture/rock fragments	1.00		
CaB:				
Candor	High		Moderate	
	Texture/rock fragments	1.00	Available water	0.50
CcA:				
Chastain	Moderate		High	
	Texture/surface depth/rock fragments	0.50	Wetness	1.00
Chewacla	Moderate		High	
	Texture/surface depth/rock fragments	0.50	Wetness	1.00

Damage by Fire and Seedling Mortality on Forestland—Continued

Map symbol and soil name	Potential for damage to soil by fire: Rating class and limiting features	Value	Potential for seedling mortality: Rating class and limiting features	Value
ChA:				
Chewacla	Moderate		High	
	Texture/surface depth/rock fragments	0.50	Wetness	1.00
Chastain	Moderate		High	
	Texture/surface depth/rock fragments	0.50	Wetness	1.00
CwD:				
Cowarts	High		Low	
	Texture/rock fragments	1.00		
CxA:				
Coxville	Moderate		High	
	Texture/rock fragments	0.50	Wetness	1.00
DaA:				
Dorovan	Moderate		High	
	Texture/rock fragments	0.50	Wetness	1.00
DoA, DoB:				
Dothan	High		Low	
	Texture/rock fragments	1.00		
DtB2:				
Dothan	Moderate		Low	
	Texture/surface depth/rock fragments	0.50		
EuA:				
Eunola	Moderate		Low	
	Texture/rock fragments	0.50		
FaA, FaB:				
Faceville	High		Low	
	Texture/rock fragments	1.00		
FbB2:				
Faceville	Moderate		Low	
	Texture/surface depth/rock fragments	0.50		
FoB:				
Foxworth	High		Low	
	Texture/surface depth/rock fragments	1.00		

Damage by Fire and Seedling Mortality on Forestland—Continued

Map symbol and soil name	Potential for damage to soil by fire: Rating class and limiting features	Value	Potential for seedling mortality: Rating class and limiting features	Value
FuB:				
Fuquay	High		Moderate	
	Texture/rock fragments	1.00	Soil reaction	0.50
GoA:				
Goldsboro	Moderate		Low	
	Texture/rock fragments	0.50		
JhA:				
Johns	High		Low	
	Texture/rock fragments	1.00		
JoA:				
Johnston	Low		High	
	Texture/rock fragments	0.10	Wetness	1.00
			Soil reaction	0.50
JzA:				
Johnston	Low		High	
	Texture/rock fragments	0.10	Wetness	1.00
			Soil reaction	0.50
Mouzon	Moderate		High	
	Texture/rock fragments	0.50	Wetness	1.00
KaA:				
Kalmia	High		Low	
	Texture/rock fragments	1.00		
LaB, LaD:				
Lakeland	High		Moderate	
	Texture/rock fragments	1.00	Available water	0.50
LbB:				
Lucknow	High		Moderate	
	Texture/rock fragments	1.00	Available water	0.50
LcB:				
Lucy	High		Moderate	
	Texture/rock fragments	1.00	Available water	0.50
LuA:				
Lumbee	Low		High	
	Texture/rock fragments	0.10	Wetness	1.00
LyA:				
Lynchburg	Low		High	
	Texture/rock fragments	0.10	Wetness	1.00

Damage by Fire and Seedling Mortality on Forestland—Continued

Map symbol and soil name	Potential for damage to soil by fire		Potential for seedling mortality	
	Rating class and limiting features	Value	Rating class and limiting features	Value
MaA:				
Marvyn	High		Low	
	Texture/rock fragments	1.00		
MaB:				
Marvyn	High		Low	
	Texture/surface depth/rock fragments	1.00		
MeA:				
Meggett	Moderate		High	
	Texture/rock fragments	0.50	Wetness	1.00
MyA:				
Myatt	Moderate		High	
	Texture/rock fragments	0.50	Wetness	1.00
			Soil reaction	0.50
Paxville	Moderate		High	
	Texture/rock fragments	0.50	Wetness	1.00
			Soil reaction	0.50
NaB2:				
Nankin	Moderate		Low	
	Texture/rock fragments	0.50		
NbC, NbD:				
Nankin	High		Low	
	Texture/rock fragments	1.00		
Lucy	High		Moderate	
	Texture/rock fragments	1.00	Available water	0.50
NeB:				
Noboco	High		Low	
	Texture/rock fragments	1.00		
NmB2:				
Noboco	Moderate		Low	
	Texture/surface depth/rock fragments	0.50		
NnA:				
Noboco	High		Low	
	Texture/rock fragments	1.00		
Goldsboro	Moderate		Low	
	Texture/rock fragments	0.50		

Damage by Fire and Seedling Mortality on Forestland—Continued

Map symbol and soil name	Potential for damage to soil by fire: Rating class and limiting features	Value	Potential for seedling mortality: Rating class and limiting features	Value
NoA, NoB:				
Norfolk	High		Low	
	Texture/rock fragments	1.00		
OkA:				
Okeetee	Moderate		High	
	Texture/rock fragments	0.50	Wetness	1.00
			Soil reaction	0.50
OrA, OrB:				
Orangeburg	High		Low	
	Texture/rock fragments	1.00		
OsB2:				
Orangeburg	Moderate		Low	
	Texture/rock fragments	0.50		
PaA:				
Paxville	High		High	
	Texture/rock fragments	1.00	Wetness	1.00
			Soil reaction	0.50
PeA, PeB:				
Pelion	High		Moderate	
	Texture/rock fragments	1.00	Soil reaction	0.50
PtD:				
Pits	Not rated		Not rated	
Udorthents	Not rated		Not rated	
RaA:				
Rains	Low		High	
	Texture/rock fragments	0.10	Wetness	1.00
SmA:				
Smithboro	Moderate		High	
	Texture/surface depth/rock fragments	0.50	Wetness	1.00
StA:				
State	High		Low	
	Texture/rock fragments	1.00		
Eunola	High		Low	
	Texture/rock fragments	1.00		

Damage by Fire and Seedling Mortality on Forestland—Continued

Map symbol and soil name	Potential for damage to soil by fire		Potential for seedling mortality	
	Rating class and limiting features	Value	Rating class and limiting features	Value
ThA, ThB:				
Thursa	High		Low	
	Texture/rock fragments	1.00		
TrB, TrC:				
Troup	High		Low	
	Texture/surface depth/rock fragments	1.00		
UdD:				
Udorthents, refuse substratum	Not rated		Not rated	
Pits	Not rated		Not rated	
VaC:				
Vaucluse	High		Moderate	
	Texture/surface depth/rock fragments	1.00	Soil reaction	0.50
WaB:				
Wagram	High		Moderate	
	Texture/surface depth/rock fragments	1.00	Available water	0.50

Camp Areas, Picnic Areas, and Playgrounds

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. See text for further explanation of ratings in this table.)

Map symbol and soil name	Camp areas		Picnic areas		Playgrounds	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
AaB:						
Ailey	Very limited		Very limited		Very limited	
	Too sandy	1.00	Too sandy	1.00	Too sandy	1.00
					Slope	0.12
Barnwell	Somewhat limited		Somewhat limited		Somewhat limited	
	Too sandy	0.92	Too sandy	0.92	Too sandy	0.92
	Slow water movement	0.15	Slow water movement	0.15	Slow water movement	0.15
					Slope	0.12
AcC:						
Ailey	Very limited		Very limited		Very limited	
	Too sandy	1.00	Too sandy	1.00	Slope	1.00
	Slope	0.01	Slope	0.01	Too sandy	1.00
Troup	Very limited		Very limited		Very limited	
	Too sandy	1.00	Too sandy	1.00	Slope	1.00
	Slope	0.01	Slope	0.01	Too sandy	1.00
Vaucluse	Somewhat limited		Somewhat limited		Very limited	
	Too sandy	0.88	Too sandy	0.88	Slope	1.00
	Slope	0.01	Slope	0.01	Too sandy	0.88
AeD:						
Ailey	Very limited		Very limited		Very limited	
	Too sandy	1.00	Too sandy	1.00	Slope	1.00
	Slope	0.63	Slope	0.63	Too sandy	1.00
Vaucluse	Somewhat limited		Somewhat limited		Very limited	
	Too sandy	0.88	Too sandy	0.88	Slope	1.00
	Slope	0.63	Slope	0.63	Too sandy	0.88
Troup	Very limited		Very limited		Very limited	
	Too sandy	1.00	Too sandy	1.00	Slope	1.00
	Slope	0.63	Slope	0.63	Too sandy	1.00
AgB:						
Alaga	Very limited		Very limited		Very limited	
	Too sandy	1.00	Too sandy	1.00	Too sandy	1.00
AoB:						
Alaga	Very limited		Somewhat limited		Somewhat limited	
	Flooding	1.00	Too sandy	0.97	Too sandy	0.97
	Too sandy	0.97				
Lucknow	Very limited		Very limited		Very limited	
	Flooding	1.00	Too sandy	1.00	Too sandy	1.00
	Too sandy	1.00				
ApB:						
Alpin	Very limited		Very limited		Very limited	
	Too sandy	1.00	Too sandy	1.00	Too sandy	1.00
					Slope	0.12

Camp Areas, Picnic Areas, and Playgrounds—Continued

Map symbol and soil name	Camp areas		Picnic areas		Playgrounds	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
ApD:						
Alpin	Very limited		Very limited		Very limited	
	Too sandy	1.00	Too sandy	1.00	Slope	1.00
	Slope	0.16	Slope	0.16	Too sandy	1.00
AuB:						
Autryville	Very limited		Very limited		Very limited	
	Too sandy	1.00	Too sandy	1.00	Too sandy	1.00
BaB:						
Barnwell	Somewhat limited		Somewhat limited		Somewhat limited	
	Too sandy	0.92	Too sandy	0.92	Too sandy	0.92
	Slow water movement	0.15	Slow water movement	0.15	Slope	0.50
					Slow water movement	0.15
BbB2:						
Barnwell	Somewhat limited		Somewhat limited		Somewhat limited	
	Slow water movement	0.15	Slow water movement	0.15	Slope	0.50
					Slow water movement	0.15
BcC:						
Barnwell	Somewhat limited		Somewhat limited		Very limited	
	Too sandy	0.92	Too sandy	0.92	Slope	1.00
	Slow water movement	0.15	Slow water movement	0.15	Too sandy	0.92
	Slope	0.01	Slope	0.01	Slow water movement	0.15
Cowarts	Somewhat limited		Somewhat limited		Very limited	
	Too sandy	0.84	Too sandy	0.84	Slope	1.00
	Slow water movement	0.60	Slow water movement	0.60	Too sandy	0.84
	Slope	0.01	Slope	0.01	Slow water movement	0.60
Troup	Very limited		Very limited		Very limited	
	Too sandy	1.00	Too sandy	1.00	Slope	1.00
	Slope	0.01	Slope	0.01	Too sandy	1.00
BoB:						
Bonneau	Very limited		Very limited		Very limited	
	Too sandy	1.00	Too sandy	1.00	Too sandy	1.00
BuA:						
Butters	Somewhat limited		Somewhat limited		Somewhat limited	
	Too sandy	0.98	Too sandy	0.98	Too sandy	0.98
CaB:						
Candor	Very limited		Very limited		Very limited	
	Too sandy	1.00	Too sandy	1.00	Too sandy	1.00
CcA:						
Chastain	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Flooding	1.00	Slow water movement	0.94	Flooding	1.00
	Slow water movement	0.94	Flooding	0.40	Slow water movement	0.94

Camp Areas, Picnic Areas, and Playgrounds—Continued

Map symbol and soil name	Camp areas: Rating class and limiting features	Camp areas: Value	Picnic areas: Rating class and limiting features	Picnic areas: Value	Playgrounds: Rating class and limiting features	Playgrounds: Value
Chewacla------------	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Flooding	1.00	Flooding	0.40	Flooding	1.00
ChA:						
Chewacla------------	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Flooding	1.00	Flooding	0.40	Flooding	1.00
Chastain------------	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Flooding	1.00	Slow water movement	0.94	Flooding	1.00
	Slow water movement	0.94	Flooding	0.40	Slow water movement	0.94
CwD:						
Cowarts-------------	Somewhat limited		Somewhat limited		Very limited	
	Too sandy	0.84	Too sandy	0.84	Slope	1.00
	Slope	0.63	Slope	0.63	Too sandy	0.84
	Slow water movement	0.60	Slow water movement	0.60	Slow water movement	0.60
CxA:						
Coxville------------	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Slow water movement	0.15	Slow water movement	0.15	Slow water movement	0.15
DaA:						
Dorovan-------------	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Flooding	1.00	Flooding	0.40	Flooding	1.00
DoA:						
Dothan--------------	Somewhat limited		Somewhat limited		Somewhat limited	
	Too sandy	0.60	Too sandy	0.60	Too sandy	0.60
DoB:						
Dothan--------------	Somewhat limited		Somewhat limited		Somewhat limited	
	Too sandy	0.83	Too sandy	0.83	Too sandy	0.83
					Slope	0.12
DtB2:						
Dothan--------------	Not limited		Not limited		Somewhat limited	
					Slope	0.50
EuA:						
Eunola--------------	Very limited		Somewhat limited		Somewhat limited	
	Flooding	1.00	Depth to saturated zone	0.43	Depth to saturated zone	0.77
	Depth to saturated zone	0.77	Too sandy	0.04	Too sandy	0.04
	Too sandy	0.04				

Camp Areas, Picnic Areas, and Playgrounds—Continued

Map symbol and soil name	Camp areas: Rating class and limiting features	Value	Picnic areas: Rating class and limiting features	Value	Playgrounds: Rating class and limiting features	Value
FaA:						
Faceville	Somewhat limited		Somewhat limited		Somewhat limited	
	Too sandy	0.95	Too sandy	0.95	Too sandy	0.95
FaB:						
Faceville	Somewhat limited		Somewhat limited		Somewhat limited	
	Too sandy	0.95	Too sandy	0.95	Too sandy	0.95
					Slope	0.50
FbB2:						
Faceville	Not limited		Not limited		Somewhat limited	
					Slope	0.50
FoB:						
Foxworth	Very limited		Very limited		Very limited	
	Too sandy	1.00	Too sandy	1.00	Too sandy	1.00
FuB:						
Fuquay	Very limited		Very limited		Very limited	
	Too sandy	1.00	Too sandy	1.00	Too sandy	1.00
GoA:						
Goldsboro	Somewhat limited		Somewhat limited		Somewhat limited	
	Depth to saturated zone	0.72	Depth to saturated zone	0.39	Depth to saturated zone	0.72
JhA:						
Johns	Very limited		Somewhat limited		Somewhat limited	
	Flooding	1.00	Too sandy	0.43	Depth to saturated zone	0.56
	Depth to saturated zone	0.56	Depth to saturated zone	0.28	Too sandy	0.43
	Too sandy	0.43				
JoA:						
Johnston	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Flooding	1.00	Flooding	0.40	Flooding	1.00
	Too sandy	0.02	Too sandy	0.02	Too sandy	0.02
JzA:						
Johnston	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Flooding	1.00	Flooding	0.40	Flooding	1.00
	Too sandy	0.02	Too sandy	0.02	Too sandy	0.02
Mouzon	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Flooding	1.00	Slow water movement	0.94	Flooding	1.00
	Slow water movement	0.94	Flooding	0.40	Slow water movement	0.94
KaA:						
Kalmia	Very limited		Somewhat limited		Somewhat limited	
	Flooding	1.00	Too sandy	0.49	Too sandy	0.49
	Too sandy	0.49				

Camp Areas, Picnic Areas, and Playgrounds—Continued

Map symbol and soil name	Camp areas: Rating class and limiting features	Camp areas: Value	Picnic areas: Rating class and limiting features	Picnic areas: Value	Playgrounds: Rating class and limiting features	Playgrounds: Value
LaB:						
Lakeland	Very limited		Very limited		Very limited	
	Too sandy	1.00	Too sandy	1.00	Too sandy	1.00
					Slope	0.12
LaD:						
Lakeland	Very limited		Very limited		Very limited	
	Too sandy	1.00	Too sandy	1.00	Slope	1.00
	Slope	0.37	Slope	0.37	Too sandy	1.00
LbB:						
Lucknow	Very limited		Very limited		Very limited	
	Too sandy	1.00	Too sandy	1.00	Too sandy	1.00
LcB:						
Lucy	Very limited		Very limited		Very limited	
	Too sandy	1.00	Too sandy	1.00	Too sandy	1.00
					Slope	0.12
LuA:						
Lumbee	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Flooding	1.00				
LyA:						
Lynchburg	Very limited		Somewhat limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	0.98	Depth to saturated zone	1.00
MaA:						
Marvyn	Very limited		Very limited		Very limited	
	Too sandy	1.00	Too sandy	1.00	Too sandy	1.00
MaB:						
Marvyn	Very limited		Very limited		Very limited	
	Too sandy	1.00	Too sandy	1.00	Too sandy	1.00
					Slope	0.50
MeA:						
Meggett	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Flooding	1.00	Slow water movement	0.94	Slow water movement	0.94
	Slow water movement	0.94			Flooding	0.60
MyA:						
Myatt	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Flooding	1.00			Flooding	0.60
Paxville	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Flooding	1.00			Flooding	0.60

Camp Areas, Picnic Areas, and Playgrounds—Continued

Map symbol and soil name	Camp areas		Picnic areas		Playgrounds	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
NaB2:						
Nankin	Somewhat limited		Somewhat limited		Somewhat limited	
	Slow water movement	0.60	Slow water movement	0.60	Slow water movement	0.60
					Slope	0.50
NbC:						
Nankin	Somewhat limited		Somewhat limited		Very limited	
	Too sandy	0.89	Too sandy	0.89	Slope	1.00
	Slow water movement	0.15	Slow water movement	0.15	Too sandy	0.89
	Slope	0.01	Slope	0.01	Slow water movement	0.15
Lucy	Very limited		Very limited		Very limited	
	Too sandy	1.00	Too sandy	1.00	Slope	1.00
	Slope	0.01	Slope	0.01	Too sandy	1.00
NbD:						
Nankin	Somewhat limited		Somewhat limited		Very limited	
	Too sandy	0.89	Too sandy	0.89	Slope	1.00
	Slope	0.37	Slope	0.37	Too sandy	0.89
	Slow water movement	0.15	Slow water movement	0.15	Slow water movement	0.15
Lucy	Very limited		Very limited		Very limited	
	Too sandy	1.00	Too sandy	1.00	Slope	1.00
	Slope	0.37	Slope	0.37	Too sandy	1.00
NeB:						
Noboco	Somewhat limited		Somewhat limited		Somewhat limited	
	Too sandy	0.25	Too sandy	0.25	Slope	0.50
					Too sandy	0.25
NmB2:						
Noboco	Not limited		Not limited		Somewhat limited	
					Slope	0.50
NnA:						
Noboco	Somewhat limited		Somewhat limited		Somewhat limited	
	Too sandy	0.25	Too sandy	0.25	Too sandy	0.25
Goldsboro	Somewhat limited		Somewhat limited		Somewhat limited	
	Depth to saturated zone	0.72	Depth to saturated zone	0.39	Depth to saturated zone	0.72
NoA:						
Norfolk	Somewhat limited		Somewhat limited		Somewhat limited	
	Too sandy	0.91	Too sandy	0.91	Too sandy	0.91
NoB:						
Norfolk	Somewhat limited		Somewhat limited		Somewhat limited	
	Too sandy	0.84	Too sandy	0.84	Too sandy	0.84
					Slope	0.50

Camp Areas, Picnic Areas, and Playgrounds—Continued

Map symbol and soil name	Camp areas		Picnic areas		Playgrounds	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
OkA:						
Okeetee	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Flooding	1.00	Slow water movement	0.94	Slow water movement	0.94
	Slow water movement	0.94				
OrA:						
Orangeburg	Somewhat limited		Somewhat limited		Somewhat limited	
	Too sandy	0.81	Too sandy	0.81	Too sandy	0.81
OrB:						
Orangeburg	Somewhat limited		Somewhat limited		Somewhat limited	
	Too sandy	0.81	Too sandy	0.81	Too sandy	0.81
					Slope	0.50
OsB2:						
Orangeburg	Not limited		Not limited		Somewhat limited	
					Slope	0.50
PaA:						
Paxville	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Flooding	1.00			Flooding	0.60
PeA:						
Pelion	Somewhat limited		Somewhat limited		Somewhat limited	
	Too sandy	0.93	Too sandy	0.93	Too sandy	0.93
	Slow water movement	0.60	Slow water movement	0.60	Slow water movement	0.60
	Depth to saturated zone	0.20	Depth to saturated zone	0.10	Depth to saturated zone	0.20
PeB:						
Pelion	Somewhat limited		Somewhat limited		Somewhat limited	
	Too sandy	0.93	Too sandy	0.93	Too sandy	0.93
	Slow water movement	0.60	Slow water movement	0.60	Slow water movement	0.60
	Depth to saturated zone	0.28	Depth to saturated zone	0.14	Depth to saturated zone	0.28
PtD:						
Pits	Not rated		Not rated		Not rated	
Udorthents	Not rated		Not rated		Not rated	
RaA:						
Rains	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
SmA:						
Smithboro	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Slow water movement	0.94	Slow water movement	0.94	Slow water movement	0.94

Camp Areas, Picnic Areas, and Playgrounds—Continued

Map symbol and soil name	Camp areas		Picnic areas		Playgrounds	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
StA:						
State----------------	Very limited		Somewhat limited		Somewhat limited	
	Flooding	1.00	Too sandy	0.71	Too sandy	0.71
	Too sandy	0.71				
Eunola---------------	Very limited		Somewhat limited		Somewhat limited	
	Flooding	1.00	Depth to saturated zone	0.43	Depth to saturated zone	0.77
	Depth to saturated zone	0.77	Too sandy	0.04	Too sandy	0.04
	Too sandy	0.04				
ThA:						
Thursa---------------	Somewhat limited		Somewhat limited		Somewhat limited	
	Too sandy	0.91	Too sandy	0.91	Too sandy	0.91
ThB:						
Thursa---------------	Somewhat limited		Somewhat limited		Somewhat limited	
	Too sandy	0.91	Too sandy	0.91	Too sandy	0.91
					Slope	0.12
TrB:						
Troup----------------	Very limited		Very limited		Very limited	
	Too sandy	1.00	Too sandy	1.00	Too sandy	1.00
					Slope	0.12
TrC:						
Troup----------------	Very limited		Very limited		Very limited	
	Too sandy	1.00	Too sandy	1.00	Slope	1.00
	Slope	0.01	Slope	0.01	Too sandy	1.00
UdD:						
Udorthents, refuse substratum----------	Not rated		Not rated		Not rated	
Pits-----------------	Not rated		Not rated		Not rated	
VaC:						
Vaucluse-------------	Somewhat limited		Somewhat limited		Very limited	
	Too sandy	0.88	Too sandy	0.88	Slope	1.00
	Slope	0.01	Slope	0.01	Too sandy	0.88
WaB:						
Wagram---------------	Very limited		Very limited		Very limited	
	Too sandy	1.00	Too sandy	1.00	Too sandy	1.00

Paths, Trails and Golf Fairways

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. See text for further explanation of ratings in this table.)

Map symbol and soil name	Paths and trails		Off-road motorcycle trails		Golf fairways	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
AaB:						
Ailey	Very limited		Very limited		Somewhat limited	
	Too sandy	1.00	Too sandy	1.00	Droughty	0.99
					Too sandy	0.50
Barnwell	Somewhat limited		Somewhat limited		Somewhat limited	
	Too sandy	0.92	Too sandy	0.92	Too sandy	0.50
AcC:						
Ailey	Very limited		Very limited		Somewhat limited	
	Too sandy	1.00	Too sandy	1.00	Droughty	0.99
					Too sandy	0.50
					Slope	0.01
Troup	Very limited		Very limited		Very limited	
	Too sandy	1.00	Too sandy	1.00	Droughty	0.99
					Too sandy	0.50
					Slope	0.01
Vaucluse	Somewhat limited		Somewhat limited		Very limited	
	Too sandy	0.88	Too sandy	0.88	Droughty	1.00
					Slope	0.01
AeD:						
Ailey	Very limited		Very limited		Somewhat limited	
	Too sandy	1.00	Too sandy	1.00	Droughty	0.99
					Slope	0.63
					Too sandy	0.50
Vaucluse	Somewhat limited		Somewhat limited		Very limited	
	Too sandy	0.88	Too sandy	0.88	Droughty	1.00
					Slope	0.63
Troup	Very limited		Very limited		Very limited	
	Too sandy	1.00	Too sandy	1.00	Droughty	0.99
					Slope	0.63
					Too sandy	0.50
AgB:						
Alaga	Very limited		Very limited		Somewhat limited	
	Too sandy	1.00	Too sandy	1.00	Droughty	0.76
					Too sandy	0.50
AoB:						
Alaga	Somewhat limited		Somewhat limited		Somewhat limited	
	Too sandy	0.97	Too sandy	0.97	Too sandy	0.50
					Droughty	0.31
Lucknow	Very limited		Very limited		Very limited	
	Too sandy	1.00	Too sandy	1.00	Too sandy	1.00
					Droughty	1.00
ApB:						
Alpin	Very limited		Very limited		Very limited	
	Too sandy	1.00	Too sandy	1.00	Droughty	1.00
					Too sandy	0.50

Paths, Trails and Golf Fairways—Continued

Map symbol and soil name	Paths and trails: Rating class and limiting features	Value	Off-road motorcycle trails: Rating class and limiting features	Value	Golf fairways: Rating class and limiting features	Value
ApD:						
Alpin	Very limited		Very limited		Very limited	
	Too sandy	1.00	Too sandy	1.00	Droughty	1.00
					Too sandy	0.50
					Slope	0.16
AuB:						
Autryville	Very limited		Very limited		Somewhat limited	
	Too sandy	1.00	Too sandy	1.00	Droughty	0.55
					Too sandy	0.50
BaB:						
Barnwell	Somewhat limited		Somewhat limited		Somewhat limited	
	Too sandy	0.92	Too sandy	0.92	Too sandy	0.50
BbB2:						
Barnwell	Not limited		Not limited		Not limited	
BcC:						
Barnwell	Somewhat limited		Somewhat limited		Somewhat limited	
	Too sandy	0.92	Too sandy	0.92	Too sandy	0.50
					Slope	0.01
Cowarts	Somewhat limited		Somewhat limited		Somewhat limited	
	Too sandy	0.84	Too sandy	0.84	Droughty	0.01
					Slope	0.01
Troup	Very limited		Very limited		Very limited	
	Too sandy	1.00	Too sandy	1.00	Droughty	0.99
					Too sandy	0.50
					Slope	0.01
BoB:						
Bonneau	Very limited		Very limited		Somewhat limited	
	Too sandy	1.00	Too sandy	1.00	Too sandy	0.50
					Droughty	0.31
BuA:						
Butters	Somewhat limited		Somewhat limited		Very limited	
	Too sandy	0.98	Too sandy	0.98	Too sandy	1.00
					Droughty	0.07
CaB:						
Candor	Very limited		Very limited		Somewhat limited	
	Too sandy	1.00	Too sandy	1.00	Droughty	0.97
					Too sandy	0.50
CcA:						
Chastain	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Flooding	1.00
	Flooding	0.40	Flooding	0.40	Depth to saturated zone	1.00
Chewacla	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Flooding	1.00
	Flooding	0.40	Flooding	0.40	Depth to saturated zone	1.00

Paths, Trails and Golf Fairways—Continued

Map symbol and soil name	Paths and trails: Rating class and limiting features	Value	Off-road motorcycle trails: Rating class and limiting features	Value	Golf fairways: Rating class and limiting features	Value
ChA:						
Chewacla	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Flooding	1.00
	Flooding	0.40	Flooding	0.40	Depth to saturated zone	1.00
Chastain	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Flooding	1.00
	Flooding	0.40	Flooding	0.40	Depth to saturated zone	1.00
CwD:						
Cowarts	Somewhat limited		Somewhat limited		Somewhat limited	
	Too sandy	0.84	Too sandy	0.84	Slope	0.63
					Droughty	0.01
CxA:						
Coxville	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
DaA:						
Dorovan	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Flooding	1.00
	Flooding	0.40	Flooding	0.40	Depth to saturated zone	1.00
DoA:						
Dothan	Somewhat limited		Somewhat limited		Not limited	
	Too sandy	0.60	Too sandy	0.60		
DoB:						
Dothan	Somewhat limited		Somewhat limited		Not limited	
	Too sandy	0.83	Too sandy	0.83		
DtB2:						
Dothan	Not limited		Not limited		Not limited	
EuA:						
Eunola	Somewhat limited		Somewhat limited		Somewhat limited	
	Depth to saturated zone	0.08	Depth to saturated zone	0.08	Depth to saturated zone	0.43
	Too sandy	0.04	Too sandy	0.04		
FaA, FaB:						
Faceville	Somewhat limited		Somewhat limited		Not limited	
	Too sandy	0.95	Too sandy	0.95		
FbB2:						
Faceville	Not limited		Not limited		Not limited	
FoB:						
Foxworth	Very limited		Very limited		Very limited	
	Too sandy	1.00	Too sandy	1.00	Droughty	0.99
					Too sandy	0.50
FuB:						
Fuquay	Very limited		Very limited		Somewhat limited	
	Too sandy	1.00	Too sandy	1.00	Too sandy	0.50
					Droughty	0.38

Paths, Trails and Golf Fairways—Continued

Map symbol and soil name	Paths and trails: Rating class and limiting features	Value	Off-road motorcycle trails: Rating class and limiting features	Value	Golf fairways: Rating class and limiting features	Value
GoA:						
Goldsboro-----------	Somewhat limited		Somewhat limited		Somewhat limited	
	Depth to saturated zone	0.06	Depth to saturated zone	0.06	Depth to saturated zone	0.39
JhA:						
Johns---------------	Somewhat limited		Somewhat limited		Somewhat limited	
	Too sandy	0.43	Too sandy	0.43	Depth to saturated zone	0.28
	Depth to saturated zone	0.01	Depth to saturated zone	0.01		
JoA:						
Johnston------------	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Flooding	1.00
	Flooding	0.40	Flooding	0.40	Depth to saturated zone	1.00
	Too sandy	0.02	Too sandy	0.02		
JzA:						
Johnston------------	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Flooding	1.00
	Flooding	0.40	Flooding	0.40	Depth to saturated zone	1.00
	Too sandy	0.02	Too sandy	0.02		
Mouzon--------------	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Flooding	1.00
	Flooding	0.40	Flooding	0.40	Depth to saturated zone	1.00
KaA:						
Kalmia--------------	Somewhat limited		Somewhat limited		Somewhat limited	
	Too sandy	0.49	Too sandy	0.49	Droughty	0.01
LaB:						
Lakeland------------	Very limited		Very limited		Very limited	
	Too sandy	1.00	Too sandy	1.00	Droughty	1.00
					Too sandy	0.50
LaD:						
Lakeland------------	Very limited		Very limited		Very limited	
	Too sandy	1.00	Too sandy	1.00	Droughty	1.00
					Too sandy	0.50
					Slope	0.37
LbB:						
Lucknow-------------	Very limited		Very limited		Very limited	
	Too sandy	1.00	Too sandy	1.00	Too sandy	1.00
					Droughty	1.00
LcB:						
Lucy----------------	Very limited		Very limited		Somewhat limited	
	Too sandy	1.00	Too sandy	1.00	Too sandy	0.50
					Droughty	0.22
LuA:						
Lumbee--------------	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00

Paths, Trails and Golf Fairways—Continued

Map symbol and soil name	Paths and trails: Rating class and limiting features	Value	Off-road motorcycle trails: Rating class and limiting features	Value	Golf fairways: Rating class and limiting features	Value
LyA:						
Lynchburg	Somewhat limited		Somewhat limited		Somewhat limited	
	Depth to saturated zone	0.96	Depth to saturated zone	0.96	Depth to saturated zone	0.98
MaA, MaB:						
Marvyn	Very limited		Very limited		Somewhat limited	
	Too sandy	1.00	Too sandy	1.00	Too sandy	0.50
MeA:						
Meggett	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
					Flooding	0.60
MyA:						
Myatt	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
					Flooding	0.60
Paxville	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
					Flooding	0.60
NaB2:						
Nankin	Not limited		Not limited		Not limited	
NbC:						
Nankin	Somewhat limited		Somewhat limited		Somewhat limited	
	Too sandy	0.89	Too sandy	0.89	Slope	0.01
Lucy	Very limited		Very limited		Somewhat limited	
	Too sandy	1.00	Too sandy	1.00	Too sandy	0.50
					Droughty	0.22
					Slope	0.01
NbD:						
Nankin	Somewhat limited		Somewhat limited		Somewhat limited	
	Too sandy	0.89	Too sandy	0.89	Slope	0.37
Lucy	Very limited		Very limited		Somewhat limited	
	Too sandy	1.00	Too sandy	1.00	Too sandy	0.50
					Slope	0.37
					Droughty	0.22
NeB:						
Noboco	Somewhat limited		Somewhat limited		Not limited	
	Too sandy	0.25	Too sandy	0.25		
NmB2:						
Noboco	Not limited		Not limited		Not limited	
NnA:						
Noboco	Somewhat limited		Somewhat limited		Not limited	
	Too sandy	0.25	Too sandy	0.25		

Paths, Trails and Golf Fairways—Continued

Map symbol and soil name	Paths and trails: Rating class and limiting features	Value	Off-road motorcycle trails: Rating class and limiting features	Value	Golf fairways: Rating class and limiting features	Value
Goldsboro	Somewhat limited		Somewhat limited		Somewhat limited	
	Depth to saturated zone	0.06	Depth to saturated zone	0.06	Depth to saturated zone	0.39
NoA:						
Norfolk	Somewhat limited		Somewhat limited		Not limited	
	Too sandy	0.91	Too sandy	0.91		
NoB:						
Norfolk	Somewhat limited		Somewhat limited		Not limited	
	Too sandy	0.84	Too sandy	0.84		
OkA:						
Okeetee	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
OrA, OrB:						
Orangeburg	Somewhat limited		Somewhat limited		Not limited	
	Too sandy	0.81	Too sandy	0.81		
OsB2:						
Orangeburg	Not limited		Not limited		Not limited	
PaA:						
Paxville	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
					Flooding	0.60
PeA:						
Pelion	Somewhat limited		Somewhat limited		Somewhat limited	
	Too sandy	0.93	Too sandy	0.93	Depth to saturated zone	0.10
PeB:						
Pelion	Somewhat limited		Somewhat limited		Somewhat limited	
	Too sandy	0.93	Too sandy	0.93	Depth to saturated zone	0.14
PtD:						
Pits	Not rated		Not rated		Not rated	
Udorthents	Not rated		Not rated		Not rated	
RaA:						
Rains	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
SmA:						
Smithboro	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
StA:						
State	Somewhat limited		Somewhat limited		Not limited	
	Too sandy	0.71	Too sandy	0.71		

Paths, Trails and Golf Fairways—Continued

Map symbol and soil name	Paths and trails		Off-road motorcycle trails		Golf fairways	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
Eunola	Somewhat limited		Somewhat limited		Somewhat limited	
	Depth to saturated zone	0.08	Depth to saturated zone	0.08	Depth to saturated zone	0.43
	Too sandy	0.04	Too sandy	0.04		
ThA, ThB:						
Thursa	Somewhat limited		Somewhat limited		Not limited	
	Too sandy	0.91	Too sandy	0.91		
TrB:						
Troup	Very limited		Very limited		Very limited	
	Too sandy	1.00	Too sandy	1.00	Droughty	0.99
					Too sandy	0.50
TrC:						
Troup	Very limited		Very limited		Very limited	
	Too sandy	1.00	Too sandy	1.00	Droughty	0.99
					Too sandy	0.50
					Slope	0.01
UdD:						
Udorthents, refuse substratum	Not rated		Not rated		Not rated	
Pits	Not rated		Not rated		Not rated	
VaC:						
Vaucluse	Somewhat limited		Somewhat limited		Very limited	
	Too sandy	0.88	Too sandy	0.88	Droughty	1.00
					Slope	0.01
WaB:						
Wagram	Very limited		Very limited		Somewhat limited	
	Too sandy	1.00	Too sandy	1.00	Droughty	0.97
					Too sandy	0.50

Dwellings and Small Commercial Buildings

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. See text for further explanation of ratings in this table.)

Map symbol and soil name	Dwellings without basements		Dwellings with basements		Small commercial buildings	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
AaB:						
Ailey---------------	Not limited		Not limited		Not limited	
Barnwell------------	Not limited		Somewhat limited		Not limited	
			Depth to saturated zone	0.76		
AcC:						
Ailey---------------	Somewhat limited		Somewhat limited		Very limited	
	Slope	0.01	Slope	0.01	Slope	1.00
Troup---------------	Somewhat limited		Somewhat limited		Very limited	
	Slope	0.01	Slope	0.01	Slope	1.00
Vaucluse------------	Somewhat limited		Somewhat limited		Very limited	
	Slope	0.01	Slope	0.01	Slope	1.00
AeD:						
Ailey---------------	Somewhat limited		Somewhat limited		Very limited	
	Slope	0.63	Slope	0.63	Slope	1.00
Vaucluse------------	Somewhat limited		Somewhat limited		Very limited	
	Slope	0.63	Slope	0.63	Slope	1.00
Troup---------------	Somewhat limited		Somewhat limited		Very limited	
	Slope	0.63	Slope	0.63	Slope	1.00
AgB:						
Alaga---------------	Not limited		Somewhat limited		Not limited	
			Depth to saturated zone	0.02		
AoB:						
Alaga---------------	Very limited		Very limited		Very limited	
	Flooding	1.00	Flooding	1.00	Flooding	1.00
			Depth to saturated zone	0.29		
Lucknow-------------	Very limited		Very limited		Very limited	
	Flooding	1.00	Flooding	1.00	Flooding	1.00
			Depth to saturated zone	0.29		
ApB:						
Alpin---------------	Not limited		Not limited		Not limited	
ApD:						
Alpin---------------	Somewhat limited		Somewhat limited		Very limited	
	Slope	0.16	Slope	0.16	Slope	1.00
AuB:						
Autryville----------	Not limited		Somewhat limited		Not limited	
			Depth to saturated zone	0.16		

Dwellings and Small Commercial Buildings—Continued

Map symbol and soil name	Dwellings without basements		Dwellings with basements		Small commercial buildings	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
BaB:						
Barnwell------------	Not limited		Somewhat limited		Not limited	
			Depth to saturated zone	0.76		
BbB2:						
Barnwell------------	Not limited		Somewhat limited		Not limited	
			Depth to saturated zone	0.76		
BcC:						
Barnwell------------	Somewhat limited		Somewhat limited		Very limited	
	Slope	0.01	Depth to saturated zone	0.76	Slope	1.00
			Slope	0.01		
Cowarts-------------	Somewhat limited		Somewhat limited		Very limited	
	Slope	0.01	Slope	0.01	Slope	1.00
Troup---------------	Somewhat limited		Somewhat limited		Very limited	
	Slope	0.01	Slope	0.01	Slope	1.00
BoB:						
Bonneau-------------	Not limited		Somewhat limited		Not limited	
			Depth to saturated zone	0.72		
BuA:						
Butters-------------	Not limited		Somewhat limited		Not limited	
			Depth to saturated zone	0.28		
CaB:						
Candor--------------	Not limited		Not limited		Not limited	
CcA:						
Chastain------------	Very limited		Very limited		Very limited	
	Flooding	1.00	Flooding	1.00	Flooding	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
Chewacla------------	Very limited		Very limited		Very limited	
	Flooding	1.00	Flooding	1.00	Flooding	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
ChA:						
Chewacla------------	Very limited		Very limited		Very limited	
	Flooding	1.00	Flooding	1.00	Flooding	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
Chastain------------	Very limited		Very limited		Very limited	
	Flooding	1.00	Flooding	1.00	Flooding	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
CwD:						
Cowarts-------------	Somewhat limited		Somewhat limited		Very limited	
	Slope	0.63	Slope	0.63	Slope	1.00

Dwellings and Small Commercial Buildings—Continued

Map symbol and soil name	Dwellings without basements		Dwellings with basements		Small commercial buildings	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
CxA:						
Coxville------------	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
DaA:						
Dorovan-------------	Very limited		Very limited		Very limited	
	Subsidence	1.00	Subsidence	1.00	Subsidence	1.00
	Flooding	1.00	Flooding	1.00	Flooding	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
DoA:						
Dothan--------------	Not limited		Somewhat limited		Not limited	
			Depth to saturated zone	0.73		
DoB:						
Dothan--------------	Not limited		Somewhat limited		Not limited	
			Depth to saturated zone	0.70		
DtB2:						
Dothan--------------	Not limited		Somewhat limited		Not limited	
			Depth to saturated zone	0.70		
EuA:						
Eunola--------------	Very limited		Very limited		Very limited	
	Flooding	1.00	Flooding	1.00	Flooding	1.00
	Depth to saturated zone	0.77	Depth to saturated zone	1.00	Depth to saturated zone	0.77
FaA, FaB:						
Faceville-----------	Not limited		Not limited		Not limited	
FbB2:						
Faceville-----------	Not limited		Not limited		Not limited	
FoB:						
Foxworth------------	Not limited		Somewhat limited		Not limited	
			Depth to saturated zone	0.06		
FuB:						
Fuquay--------------	Not limited		Somewhat limited		Not limited	
			Depth to saturated zone	0.60		
GoA:						
Goldsboro-----------	Somewhat limited		Very limited		Somewhat limited	
	Depth to saturated zone	0.72	Depth to saturated zone	1.00	Depth to saturated zone	0.72
JhA:						
Johns---------------	Very limited		Very limited		Very limited	
	Flooding	1.00	Flooding	1.00	Flooding	1.00
	Depth to saturated zone	0.56	Depth to saturated zone	1.00	Depth to saturated zone	0.56

Dwellings and Small Commercial Buildings—Continued

Map symbol and soil name	Dwellings without basements: Rating class and limiting features	Value	Dwellings with basements: Rating class and limiting features	Value	Small commercial buildings: Rating class and limiting features	Value
JoA:						
Johnston	Very limited		Very limited		Very limited	
	Flooding	1.00	Flooding	1.00	Flooding	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
JzA:						
Johnston	Very limited		Very limited		Very limited	
	Flooding	1.00	Flooding	1.00	Flooding	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
Mouzon	Very limited		Very limited		Very limited	
	Flooding	1.00	Flooding	1.00	Flooding	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
KaA:						
Kalmia	Very limited		Very limited		Very limited	
	Flooding	1.00	Flooding	1.00	Flooding	1.00
			Depth to saturated zone	0.54		
LaB:						
Lakeland	Not limited		Not limited		Not limited	
LaD:						
Lakeland	Somewhat limited		Somewhat limited		Very limited	
	Slope	0.37	Slope	0.37	Slope	1.00
LbB:						
Lucknow	Not limited		Somewhat limited		Not limited	
			Depth to saturated zone	0.29		
LcB:						
Lucy	Not limited		Not limited		Not limited	
LuA:						
Lumbee	Very limited		Very limited		Very limited	
	Flooding	1.00	Flooding	1.00	Flooding	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
LyA:						
Lynchburg	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
MaA, MaB:						
Marvyn	Not limited		Not limited		Not limited	
MeA:						
Meggett	Very limited		Very limited		Very limited	
	Flooding	1.00	Flooding	1.00	Flooding	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50

Dwellings and Small Commercial Buildings—Continued

Map symbol and soil name	Dwellings without basements		Dwellings with basements		Small commercial buildings	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
MyA:						
Myatt	Very limited		Very limited		Very limited	
	Flooding	1.00	Flooding	1.00	Flooding	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
Paxville	Very limited		Very limited		Very limited	
	Flooding	1.00	Flooding	1.00	Flooding	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
NaB2:						
Nankin	Not limited		Not limited		Not limited	
NbC:						
Nankin	Somewhat limited		Somewhat limited		Very limited	
	Slope	0.01	Slope	0.01	Slope	1.00
Lucy	Somewhat limited		Somewhat limited		Very limited	
	Slope	0.01	Slope	0.01	Slope	1.00
NbD:						
Nankin	Somewhat limited		Somewhat limited		Very limited	
	Slope	0.37	Slope	0.37	Slope	1.00
Lucy	Somewhat limited		Somewhat limited		Very limited	
	Slope	0.37	Slope	0.37	Slope	1.00
NeB:						
Noboco	Not limited		Somewhat limited		Not limited	
			Depth to saturated zone	0.92		
NmB2:						
Noboco	Not limited		Somewhat limited		Not limited	
			Depth to saturated zone	0.92		
NnA:						
Noboco	Not limited		Somewhat limited		Not limited	
			Depth to saturated zone	0.95		
Goldsboro	Somewhat limited		Very limited		Somewhat limited	
	Depth to saturated zone	0.72	Depth to saturated zone	1.00	Depth to saturated zone	0.72
NoA, NoB:						
Norfolk	Not limited		Somewhat limited		Not limited	
			Depth to saturated zone	0.25		
OkA:						
Okeetee	Very limited		Very limited		Very limited	
	Flooding	1.00	Flooding	1.00	Flooding	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50

Dwellings and Small Commercial Buildings—Continued

Map symbol and soil name	Dwellings without basements: Rating class and limiting features	Value	Dwellings with basements: Rating class and limiting features	Value	Small commercial buildings: Rating class and limiting features	Value
OrA, OrB:						
Orangeburg----------	Not limited		Not limited		Not limited	
OsB2:						
Orangeburg----------	Not limited		Not limited		Not limited	
PaA:						
Paxville------------	Very limited		Very limited		Very limited	
	Flooding	1.00	Flooding	1.00	Flooding	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
PeA:						
Pelion--------------	Somewhat limited		Very limited		Somewhat limited	
	Depth to saturated zone	0.20	Depth to saturated zone	1.00	Depth to saturated zone	0.20
PeB:						
Pelion--------------	Somewhat limited		Very limited		Somewhat limited	
	Depth to saturated zone	0.28	Depth to saturated zone	1.00	Depth to saturated zone	0.28
PtD:						
Pits----------------	Not rated		Not rated		Not rated	
Udorthents----------	Not rated		Not rated		Not rated	
RaA:						
Rains---------------	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
SmA:						
Smithboro-----------	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50
StA:						
State---------------	Very limited		Very limited		Very limited	
	Flooding	1.00	Flooding	1.00	Flooding	1.00
			Depth to saturated zone	0.81		
Eunola--------------	Very limited		Very limited		Very limited	
	Flooding	1.00	Flooding	1.00	Flooding	1.00
	Depth to saturated zone	0.77	Depth to saturated zone	1.00	Depth to saturated zone	0.77
ThA, ThB:						
Thursa--------------	Not limited		Not limited		Not limited	
TrB:						
Troup---------------	Not limited		Not limited		Not limited	
TrC:						
Troup---------------	Somewhat limited		Somewhat limited		Very limited	
	Slope	0.01	Slope	0.01	Slope	1.00

Dwellings and Small Commercial Buildings—Continued

Map symbol and soil name	Dwellings without basements		Dwellings with basements		Small commercial buildings	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
UdD:						
Udorthents, refuse substratum---------	Not rated		Not rated		Not rated	
Pits----------------	Not rated		Not rated		Not rated	
VaC:						
Vaucluse------------	Somewhat limited		Somewhat limited		Very limited	
	Slope	0.01	Slope	0.01	Slope	1.00
WaB:						
Wagram--------------	Not limited		Not limited		Not limited	

Roads and Streets, Shallow Excavations, and Lawns and Landscaping

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. See text for further explanation of ratings in this table.)

Map symbol and soil name	Local roads and streets		Shallow excavations		Lawns and landscaping	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
AaB:						
Ailey---------------	Not limited		Very limited		Somewhat limited	
			Cutbanks cave	1.00	Droughty	0.99
					Too sandy	0.50
Barnwell------------	Not limited		Somewhat limited		Somewhat limited	
			Too clayey	0.92	Too sandy	0.50
			Depth to saturated zone	0.76		
			Dense layer	0.50		
AcC:						
Ailey---------------	Somewhat limited		Very limited		Somewhat limited	
	Slope	0.01	Cutbanks cave	1.00	Droughty	0.99
			Dense layer	0.50	Too sandy	0.50
			Slope	0.01	Slope	0.01
Troup---------------	Somewhat limited		Very limited		Very limited	
	Slope	0.01	Cutbanks cave	1.00	Droughty	0.99
			Slope	0.01	Too sandy	0.50
					Slope	0.01
Vaucluse------------	Somewhat limited		Somewhat limited		Very limited	
	Slope	0.01	Dense layer	0.50	Droughty	1.00
			Cutbanks cave	0.10	Slope	0.01
			Slope	0.01		
AeD:						
Ailey---------------	Somewhat limited		Very limited		Somewhat limited	
	Slope	0.63	Cutbanks cave	1.00	Droughty	0.99
			Slope	0.63	Slope	0.63
			Dense layer	0.50	Too sandy	0.50
Vaucluse------------	Somewhat limited		Somewhat limited		Very limited	
	Slope	0.63	Slope	0.63	Droughty	1.00
			Dense layer	0.50	Slope	0.63
			Cutbanks cave	0.10		
Troup---------------	Somewhat limited		Very limited		Very limited	
	Slope	0.63	Cutbanks cave	1.00	Droughty	0.99
			Slope	0.63	Slope	0.63
					Too sandy	0.50
AgB:						
Alaga---------------	Not limited		Very limited		Somewhat limited	
			Cutbanks cave	1.00	Droughty	0.76
			Depth to saturated zone	0.02	Too sandy	0.50
AoB:						
Alaga---------------	Somewhat limited		Very limited		Somewhat limited	
	Flooding	0.40	Cutbanks cave	1.00	Too sandy	0.50
			Depth to saturated zone	0.29	Droughty	0.31

Roads and Streets, Shallow Excavations, and Lawns and Landscaping—Continued

Map symbol and soil name	Local roads and streets		Shallow excavations		Lawns and landscaping	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
Lucknow-------------	Somewhat limited		Very limited		Very limited	
	Flooding	0.40	Cutbanks cave	1.00	Too sandy	1.00
			Depth to saturated zone	0.29	Droughty	1.00
ApB:						
Alpin---------------	Not limited		Very limited		Very limited	
			Cutbanks cave	1.00	Droughty	1.00
					Too sandy	0.50
ApD:						
Alpin---------------	Somewhat limited		Very limited		Very limited	
	Slope	0.16	Cutbanks cave	1.00	Droughty	1.00
			Slope	0.16	Too sandy	0.50
					Slope	0.16
AuB:						
Autryville----------	Not limited		Very limited		Somewhat limited	
			Cutbanks cave	1.00	Droughty	0.55
			Depth to saturated zone	0.16	Too sandy	0.50
BaB:						
Barnwell------------	Not limited		Somewhat limited		Somewhat limited	
			Too clayey	0.92	Too sandy	0.50
			Depth to saturated zone	0.76		
			Dense layer	0.50		
BbB2:						
Barnwell------------	Not limited		Somewhat limited		Not limited	
			Too clayey	0.92		
			Depth to saturated zone	0.76		
			Dense layer	0.50		
BcC:						
Barnwell------------	Somewhat limited		Somewhat limited		Somewhat limited	
	Slope	0.01	Too clayey	0.92	Too sandy	0.50
			Depth to saturated zone	0.76	Slope	0.01
			Dense layer	0.50		
Cowarts-------------	Somewhat limited		Somewhat limited		Somewhat limited	
	Slope	0.01	Cutbanks cave	0.10	Droughty	0.01
			Slope	0.01	Slope	0.01
Troup---------------	Somewhat limited		Very limited		Very limited	
	Slope	0.01	Cutbanks cave	1.00	Droughty	0.99
			Slope	0.01	Too sandy	0.50
					Slope	0.01
BoB:						
Bonneau-------------	Not limited		Very limited		Somewhat limited	
			Cutbanks cave	1.00	Too sandy	0.50
			Depth to saturated zone	0.72	Droughty	0.31

Roads and Streets, Shallow Excavations, and Lawns and Landscaping—Continued

Map symbol and soil name	Local roads and streets		Shallow excavations		Lawns and landscaping	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
BuA:						
Butters	Not limited		Very limited		Very limited	
			Cutbanks cave	1.00	Too sandy	1.00
			Depth to saturated zone	0.28	Droughty	0.07
CaB:						
Candor	Not limited		Very limited		Somewhat limited	
			Cutbanks cave	1.00	Droughty	0.97
					Too sandy	0.50
CcA:						
Chastain	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Flooding	1.00
	Flooding	1.00	Cutbanks cave	1.00	Depth to saturated zone	1.00
	Low strength	1.00	Flooding	0.80		
Chewacla	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Flooding	1.00
	Flooding	1.00	Cutbanks cave	1.00	Depth to saturated zone	1.00
	Low strength	1.00	Flooding	0.80		
ChA:						
Chewacla	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Flooding	1.00
	Flooding	1.00	Cutbanks cave	1.00	Depth to saturated zone	1.00
	Low strength	1.00	Flooding	0.80		
Chastain	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Flooding	1.00
	Flooding	1.00	Cutbanks cave	1.00	Depth to saturated zone	1.00
	Low strength	1.00	Flooding	0.80		
CwD:						
Cowarts	Somewhat limited		Somewhat limited		Somewhat limited	
	Slope	0.63	Slope	0.63	Slope	0.63
			Cutbanks cave	0.10	Droughty	0.01
CxA:						
Coxville	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Low strength	0.10	Too clayey	0.28		
			Cutbanks cave	0.10		
DaA:						
Dorovan	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Flooding	1.00
	Subsidence	1.00	Organic matter content	1.00	Depth to saturated zone	1.00
	Flooding	1.00	Cutbanks cave	1.00		

Roads and Streets, Shallow Excavations, and Lawns and Landscaping—Continued

Map symbol and soil name	Local roads and streets		Shallow excavations		Lawns and landscaping	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
DoA:						
Dothan	Not limited		Somewhat limited		Not limited	
			Depth to saturated zone	0.73		
			Cutbanks cave	0.10		
DoB:						
Dothan	Not limited		Somewhat limited		Not limited	
			Depth to saturated zone	0.70		
			Cutbanks cave	0.10		
DtB2:						
Dothan	Not limited		Somewhat limited		Not limited	
			Depth to saturated zone	0.70		
			Cutbanks cave	0.10		
EuA:						
Eunola	Somewhat limited		Very limited		Somewhat limited	
	Depth to saturated zone	0.43	Depth to saturated zone	1.00	Depth to saturated zone	0.43
	Flooding	0.40	Cutbanks cave	0.10		
FaA:						
Faceville	Somewhat limited		Somewhat limited		Not limited	
	Low strength	0.10	Too clayey	0.81		
			Cutbanks cave	0.10		
FaB:						
Faceville	Somewhat limited		Somewhat limited		Not limited	
	Low strength	0.08	Too clayey	0.81		
			Cutbanks cave	0.10		
FbB2:						
Faceville	Somewhat limited		Somewhat limited		Not limited	
	Low strength	0.10	Too clayey	0.81		
			Cutbanks cave	0.10		
FoB:						
Foxworth	Not limited		Very limited		Very limited	
			Cutbanks cave	1.00	Droughty	0.99
			Depth to saturated zone	0.06	Too sandy	0.50
FuB:						
Fuquay	Not limited		Very limited		Somewhat limited	
			Cutbanks cave	1.00	Too sandy	0.50
			Depth to saturated zone	0.60	Droughty	0.38
GoA:						
Goldsboro	Somewhat limited		Very limited		Somewhat limited	
	Depth to saturated zone	0.39	Depth to saturated zone	1.00	Depth to saturated zone	0.39
			Cutbanks cave	0.10		

Roads and Streets, Shallow Excavations, and Lawns and Landscaping—Continued

Map symbol and soil name	Local roads and streets		Shallow excavations		Lawns and landscaping	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
JhA:						
Johns	Somewhat limited		Very limited		Somewhat limited	
	Flooding	0.40	Depth to saturated zone	1.00	Depth to saturated zone	0.28
	Depth to saturated zone	0.28	Cutbanks cave	1.00		
JoA:						
Johnston	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Flooding	1.00
	Flooding	1.00	Cutbanks cave	1.00	Depth to saturated zone	1.00
			Flooding	0.80		
JzA:						
Johnston	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Flooding	1.00
	Flooding	1.00	Cutbanks cave	1.00	Depth to saturated zone	1.00
			Flooding	0.80		
Mouzon	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Flooding	1.00
	Flooding	1.00	Cutbanks cave	1.00	Depth to saturated zone	1.00
			Flooding	0.80		
KaA:						
Kalmia	Somewhat limited		Very limited		Somewhat limited	
	Flooding	0.40	Cutbanks cave	1.00	Droughty	0.01
			Depth to saturated zone	0.54		
LaB:						
Lakeland	Not limited		Very limited		Very limited	
			Cutbanks cave	1.00	Droughty	1.00
					Too sandy	0.50
LaD:						
Lakeland	Somewhat limited		Very limited		Very limited	
	Slope	0.37	Cutbanks cave	1.00	Droughty	1.00
			Slope	0.37	Too sandy	0.50
					Slope	0.37
LbB:						
Lucknow	Not limited		Very limited		Very limited	
			Cutbanks cave	1.00	Too sandy	1.00
			Depth to saturated zone	0.29	Droughty	1.00
LcB:						
Lucy	Not limited		Very limited		Somewhat limited	
			Cutbanks cave	1.00	Too sandy	0.50
					Droughty	0.22
LuA:						
Lumbee	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Flooding	0.40	Cutbanks cave	1.00		

Roads and Streets, Shallow Excavations, and Lawns and Landscaping—Continued

Map symbol and soil name	Local roads and streets		Shallow excavations		Lawns and landscaping	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
LyA:						
Lynchburg	Somewhat limited		Very limited		Somewhat limited	
	Depth to saturated zone	0.98	Depth to saturated zone	1.00	Depth to saturated zone	0.98
			Cutbanks cave	0.10		
MaA, MaB:						
Marvyn	Not limited		Somewhat limited		Somewhat limited	
			Dense layer	0.50	Too sandy	0.50
			Cutbanks cave	0.10		
MeA:						
Meggett	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Flooding	1.00	Cutbanks cave	1.00	Flooding	0.60
	Low strength	1.00	Flooding	0.60		
MyA:						
Myatt	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Flooding	1.00	Cutbanks cave	1.00	Flooding	0.60
	Low strength	1.00	Flooding	0.60		
Paxville	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Flooding	1.00	Cutbanks cave	1.00	Flooding	0.60
			Flooding	0.60		
NaB2:						
Nankin	Not limited		Somewhat limited		Not limited	
			Too clayey	0.94		
			Cutbanks cave	0.10		
NbC:						
Nankin	Somewhat limited		Somewhat limited		Somewhat limited	
	Low strength	0.10	Cutbanks cave	0.10	Slope	0.01
	Slope	0.01	Too clayey	0.02		
			Slope	0.01		
Lucy	Somewhat limited		Very limited		Somewhat limited	
	Slope	0.01	Cutbanks cave	1.00	Too sandy	0.50
			Slope	0.01	Droughty	0.22
					Slope	0.01
NbD:						
Nankin	Somewhat limited		Somewhat limited		Somewhat limited	
	Slope	0.37	Slope	0.37	Slope	0.37
	Low strength	0.10	Cutbanks cave	0.10		
			Too clayey	0.02		
Lucy	Somewhat limited		Very limited		Somewhat limited	
	Slope	0.37	Cutbanks cave	1.00	Too sandy	0.50
			Slope	0.37	Slope	0.37
					Droughty	0.22

Roads and Streets, Shallow Excavations, and Lawns and Landscaping—Continued

Map symbol and soil name	Local roads and streets: Rating class and limiting features	Value	Shallow excavations: Rating class and limiting features	Value	Lawns and landscaping: Rating class and limiting features	Value
NeB:						
Noboco	Not limited		Somewhat limited		Not limited	
			Depth to saturated zone	0.92		
			Cutbanks cave	0.10		
NmB2:						
Noboco	Not limited		Somewhat limited		Not limited	
			Depth to saturated zone	0.92		
			Cutbanks cave	0.10		
NnA:						
Noboco	Not limited		Somewhat limited		Not limited	
			Depth to saturated zone	0.95		
			Cutbanks cave	0.10		
Goldsboro	Somewhat limited		Very limited		Somewhat limited	
	Depth to saturated zone	0.39	Depth to saturated zone	1.00	Depth to saturated zone	0.39
			Cutbanks cave	0.10		
NoA, NoB:						
Norfolk	Not limited		Somewhat limited		Not limited	
			Depth to saturated zone	0.25		
			Cutbanks cave	0.10		
OkA:						
Okeetee	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Low strength	1.00	Too clayey	0.20		
	Shrink-swell	0.50	Cutbanks cave	0.10		
OrA, OrB:						
Orangeburg	Somewhat limited		Somewhat limited		Not limited	
	Low strength	0.10	Cutbanks cave	0.10		
OsB2:						
Orangeburg	Somewhat limited		Somewhat limited		Not limited	
	Low strength	0.10	Cutbanks cave	0.10		
PaA:						
Paxville	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Flooding	1.00	Cutbanks cave	1.00	Flooding	0.60
			Flooding	0.60		
PeA:						
Pelion	Somewhat limited		Very limited		Somewhat limited	
	Low strength	0.10	Depth to saturated zone	1.00	Depth to saturated zone	0.10
	Depth to saturated zone	0.10	Cutbanks cave	0.10		

Roads and Streets, Shallow Excavations, and Lawns and Landscaping—Continued

Map symbol and soil name	Local roads and streets: Rating class and limiting features	Value	Shallow excavations: Rating class and limiting features	Value	Lawns and landscaping: Rating class and limiting features	Value
PeB:						
Pelion	Somewhat limited		Very limited		Somewhat limited	
	Depth to saturated zone	0.14	Depth to saturated zone	1.00	Depth to saturated zone	0.14
	Low strength	0.10	Cutbanks cave	0.10		
PtD:						
Pits	Not rated		Not rated		Not rated	
Udorthents	Not rated		Not rated		Not rated	
RaA:						
Rains	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
			Cutbanks cave	0.10		
SmA:						
Smithboro	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Shrink-swell	0.50	Too clayey	0.88		
	Low strength	0.10	Cutbanks cave	0.10		
StA:						
State	Somewhat limited		Very limited		Not limited	
	Flooding	0.40	Cutbanks cave	1.00		
			Depth to saturated zone	0.81		
Eunola	Somewhat limited		Very limited		Somewhat limited	
	Depth to saturated zone	0.43	Depth to saturated zone	1.00	Depth to saturated zone	0.43
	Flooding	0.40	Cutbanks cave	0.10		
ThA:						
Thursa	Not limited		Somewhat limited		Not limited	
			Too clayey	0.49		
			Cutbanks cave	0.10		
ThB:						
Thursa	Not limited		Somewhat limited		Not limited	
			Too clayey	0.89		
			Cutbanks cave	0.10		
TrB:						
Troup	Not limited		Very limited		Very limited	
			Cutbanks cave	1.00	Droughty	0.99
					Too sandy	0.50
TrC:						
Troup	Somewhat limited		Very limited		Very limited	
	Slope	0.01	Cutbanks cave	1.00	Droughty	0.99
			Slope	0.01	Too sandy	0.50
					Slope	0.01
UdD:						
Udorthents, refuse substratum	Not rated		Not rated		Not rated	

Roads and Streets, Shallow Excavations, and Lawns and Landscaping—Continued

Map symbol and soil name	Local roads and streets		Shallow excavations		Lawns and landscaping	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
Pits	Not rated		Not rated		Not rated	
VaC:						
Vaucluse	Somewhat limited		Somewhat limited		Very limited	
	Slope	0.01	Dense layer	0.50	Droughty	1.00
			Cutbanks cave	0.10	Slope	0.01
			Slope	0.01		
WaB:						
Wagram	Not limited		Very limited		Somewhat limited	
			Cutbanks cave	1.00	Droughty	0.97
					Too sandy	0.50

Sewage Disposal

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. See text for further explanation of ratings in this table.)

Map symbol and soil name	Septic tank absorption fields		Sewage lagoons	
	Rating class and limiting features	Value	Rating class and limiting features	Value
AaB:				
Ailey---------------	Not limited		Very limited	
			Seepage	1.00
			Slope	0.08
Barnwell------------	Very limited		Very limited	
	Depth to saturated zone	1.00	Seepage	1.00
			Slope	0.08
	Slow water movement	1.00		
AcC:				
Ailey---------------	Somewhat limited		Very limited	
	Slope	0.01	Seepage	1.00
			Slope	1.00
Troup---------------	Somewhat limited		Very limited	
	Slow water movement	0.32	Seepage	1.00
			Slope	1.00
	Slope	0.01		
Vaucluse------------	Very limited		Very limited	
	Seepage, bottom layer	1.00	Slope	1.00
			Seepage	1.00
	Slope	0.01		
AeD:				
Ailey---------------	Somewhat limited		Very limited	
	Slope	0.63	Slope	1.00
			Seepage	1.00
Vaucluse------------	Very limited		Very limited	
	Seepage, bottom layer	1.00	Slope	1.00
			Seepage	1.00
	Slope	0.63		
Troup---------------	Somewhat limited		Very limited	
	Slope	0.63	Slope	1.00
	Slow water movement	0.32	Seepage	1.00
AgB:				
Alaga---------------	Very limited		Very limited	
	Seepage, bottom layer	1.00	Seepage	1.00
	Filtering capacity	1.00		
	Depth to saturated zone	0.03		

Sewage Disposal—Continued

Map symbol and soil name	Septic tank absorption fields		Sewage lagoons	
	Rating class and limiting features	Value	Rating class and limiting features	Value
AoB:				
Alaga	Very limited		Very limited	
	Seepage, bottom layer	1.00	Seepage	1.00
	Filtering capacity	1.00	Flooding	0.40
	Depth to saturated zone	0.75	Depth to saturated zone	0.08
Lucknow	Somewhat limited		Very limited	
	Depth to saturated zone	0.75	Seepage	1.00
	Flooding	0.40	Flooding	0.40
	Slow water movement	0.32	Depth to saturated zone	0.08
ApB:				
Alpin	Very limited		Very limited	
	Seepage, bottom layer	1.00	Seepage	1.00
			Slope	0.08
ApD:				
Alpin	Very limited		Very limited	
	Seepage, bottom layer	1.00	Seepage	1.00
	Slope	0.16	Slope	1.00
AuB:				
Autryville	Somewhat limited		Very limited	
	Depth to saturated zone	0.43	Seepage	1.00
	Slow water movement	0.32		
BaB:				
Barnwell	Very limited		Very limited	
	Depth to saturated zone	1.00	Seepage	1.00
	Slow water movement	1.00	Slope	0.32
BbB2:				
Barnwell	Very limited		Very limited	
	Depth to saturated zone	1.00	Seepage	1.00
	Slow water movement	1.00	Slope	0.32
BcC:				
Barnwell	Very limited		Very limited	
	Depth to saturated zone	1.00	Slope	1.00
	Slow water movement	1.00	Seepage	1.00
	Slope	0.01		
Cowarts	Somewhat limited		Very limited	
	Slow water movement	0.32	Slope	1.00
	Slope	0.01	Seepage	0.68

Sewage Disposal—Continued

Map symbol and soil name	Septic tank absorption fields		Sewage lagoons	
	Rating class and limiting features	Value	Rating class and limiting features	Value
Troup	Somewhat limited		Very limited	
	Slow water movement	0.32	Seepage	1.00
	Slope	0.01	Slope	1.00
BoB:				
Bonneau	Very limited		Very limited	
	Depth to saturated zone	1.00	Seepage	1.00
	Slow water movement	0.32	Depth to saturated zone	0.90
BuA:				
Butters	Somewhat limited		Very limited	
	Depth to saturated zone	0.73	Seepage	1.00
	Slow water movement	0.32	Depth to saturated zone	0.06
CaB:				
Candor	Somewhat limited		Very limited	
	Slow water movement	0.32	Seepage	1.00
CcA:				
Chastain	Very limited		Very limited	
	Flooding	1.00	Flooding	1.00
	Slow water movement	1.00	Seepage	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00
Chewacla	Very limited		Very limited	
	Flooding	1.00	Flooding	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Seepage, bottom layer	1.00	Seepage	0.68
ChA:				
Chewacla	Very limited		Very limited	
	Flooding	1.00	Flooding	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Seepage, bottom layer	1.00	Seepage	0.68
Chastain	Very limited		Very limited	
	Flooding	1.00	Flooding	1.00
	Slow water movement	1.00	Seepage	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00
CwD:				
Cowarts	Somewhat limited		Very limited	
	Slope	0.63	Slope	1.00
	Slow water movement	0.32	Seepage	0.68

Sewage Disposal—Continued

Map symbol and soil name	Septic tank absorption fields		Sewage lagoons	
	Rating class and limiting features	Value	Rating class and limiting features	Value
CxA:				
Coxville	Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Slow water movement	1.00		
DaA:				
Dorovan	Very limited		Very limited	
	Flooding	1.00	Flooding	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Subsidence	1.00	Organic matter content	1.00
DoA:				
Dothan	Very limited		Somewhat limited	
	Depth to saturated zone	1.00	Seepage	0.68
	Slow water movement	0.32		
DoB:				
Dothan	Very limited		Somewhat limited	
	Depth to saturated zone	1.00	Seepage	0.68
			Slope	0.08
	Slow water movement	0.32		
DtB2:				
Dothan	Very limited		Somewhat limited	
	Depth to saturated zone	1.00	Seepage	0.68
			Slope	0.32
	Slow water movement	0.32		
EuA:				
Eunola	Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Seepage, bottom layer	1.00	Seepage	1.00
			Flooding	0.40
	Flooding	0.40		
FaA:				
Faceville	Somewhat limited		Very limited	
	Slow water movement	0.32	Seepage	1.00
FaB:				
Faceville	Somewhat limited		Very limited	
	Slow water movement	0.32	Seepage	1.00
			Slope	0.32
FbB2:				
Faceville	Somewhat limited		Somewhat limited	
	Slow water movement	0.32	Seepage	0.68
			Slope	0.32

Sewage Disposal—Continued

Map symbol and soil name	Septic tank absorption fields		Sewage lagoons	
	Rating class and limiting features	Value	Rating class and limiting features	Value
FoB:				
Foxworth------------	Very limited		Very limited	
	Seepage, bottom layer	1.00	Seepage	1.00
	Filtering capacity	1.00		
	Depth to saturated zone	0.16		
FuB:				
Fuquay--------------	Somewhat limited		Very limited	
	Depth to saturated zone	0.99	Seepage	1.00
	Slow water movement	0.32		
GoA:				
Goldsboro-----------	Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Slow water movement	0.32	Seepage	0.68
JhA:				
Johns---------------	Very limited		Very limited	
	Depth to saturated zone	1.00	Seepage	1.00
	Seepage, bottom layer	1.00	Depth to saturated zone	1.00
	Flooding	0.40	Flooding	0.40
JoA:				
Johnston------------	Very limited		Very limited	
	Flooding	1.00	Flooding	1.00
	Depth to saturated zone	1.00	Seepage	1.00
	Seepage, bottom layer	1.00	Depth to saturated zone	1.00
JzA:				
Johnston------------	Very limited		Very limited	
	Flooding	1.00	Flooding	1.00
	Depth to saturated zone	1.00	Seepage	1.00
	Seepage, bottom layer	1.00	Depth to saturated zone	1.00
Mouzon--------------	Very limited		Very limited	
	Flooding	1.00	Flooding	1.00
	Slow water movement	1.00	Seepage	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00

Sewage Disposal—Continued

Map symbol and soil name	Septic tank absorption fields: Rating class and limiting features	Value	Sewage lagoons: Rating class and limiting features	Value
KaA:				
Kalmia	Very limited		Very limited	
	Seepage, bottom layer	1.00	Seepage	1.00
	Depth to saturated zone	0.98	Depth to saturated zone	0.56
	Flooding	0.40	Flooding	0.40
LaB:				
Lakeland	Very limited		Very limited	
	Seepage, bottom layer	1.00	Seepage	1.00
	Filtering capacity	1.00	Slope	0.08
LaD:				
Lakeland	Very limited		Very limited	
	Seepage, bottom layer	1.00	Seepage	1.00
	Filtering capacity	1.00	Slope	1.00
	Slope	0.37		
LbB:				
Lucknow	Somewhat limited		Very limited	
	Depth to saturated zone	0.75	Seepage	1.00
	Slow water movement	0.32	Depth to saturated zone	0.08
LcB:				
Lucy	Somewhat limited		Very limited	
	Slow water movement	0.32	Seepage	1.00
			Slope	0.08
LuA:				
Lumbee	Very limited		Very limited	
	Depth to saturated zone	1.00	Seepage	1.00
	Seepage, bottom layer	1.00	Depth to saturated zone	1.00
	Flooding	0.40	Flooding	0.40
LyA:				
Lynchburg	Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Slow water movement	0.32	Seepage	0.68
MaA:				
Marvyn	Very limited		Very limited	
	Seepage, bottom layer	1.00	Seepage	1.00
	Slow water movement	0.32		

Sewage Disposal—Continued

Map symbol and soil name	Septic tank absorption fields		Sewage lagoons	
	Rating class and limiting features	Value	Rating class and limiting features	Value
MaB:				
Marvyn	Very limited		Very limited	
	Seepage, bottom layer	1.00	Seepage	1.00
	Slow water movement	0.32	Slope	0.32
MeA:				
Meggett	Very limited		Very limited	
	Flooding	1.00	Flooding	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Slow water movement	1.00	Seepage	1.00
MyA:				
Myatt	Very limited		Very limited	
	Flooding	1.00	Flooding	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Seepage, bottom layer	1.00	Seepage	1.00
Paxville	Very limited		Very limited	
	Flooding	1.00	Flooding	1.00
	Depth to saturated zone	1.00	Seepage	1.00
	Seepage, bottom layer	1.00	Depth to saturated zone	1.00
NaB2:				
Nankin	Very limited		Somewhat limited	
	Slow water movement	1.00	Slope	0.32
NbC:				
Nankin	Very limited		Very limited	
	Slow water movement	1.00	Seepage	1.00
	Slope	0.01	Slope	1.00
Lucy	Somewhat limited		Very limited	
	Slow water movement	0.32	Seepage	1.00
	Slope	0.01	Slope	1.00
NbD:				
Nankin	Very limited		Very limited	
	Slow water movement	1.00	Slope	1.00
	Slope	0.37	Seepage	1.00
Lucy	Somewhat limited		Very limited	
	Slope	0.37	Slope	1.00
	Slow water movement	0.32	Seepage	1.00

Sewage Disposal—Continued

Map symbol and soil name	Septic tank absorption fields		Sewage lagoons	
	Rating class and limiting features	Value	Rating class and limiting features	Value
NeB:				
Noboco	Very limited		Very limited	
	Depth to saturated zone	1.00	Seepage	1.00
	Slow water movement	0.32	Depth to saturated zone	1.00
			Slope	0.32
NmB2:				
Noboco	Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Slow water movement	0.32	Seepage	0.68
			Slope	0.32
NnA:				
Noboco	Very limited		Very limited	
	Depth to saturated zone	1.00	Seepage	1.00
	Slow water movement	0.32	Depth to saturated zone	1.00
Goldsboro	Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Slow water movement	0.32	Seepage	0.68
NoA:				
Norfolk	Somewhat limited		Very limited	
	Depth to saturated zone	0.68	Seepage	1.00
	Slow water movement	0.32	Depth to saturated zone	0.04
NoB:				
Norfolk	Somewhat limited		Very limited	
	Depth to saturated zone	0.68	Seepage	1.00
	Slow water movement	0.32	Slope	0.32
			Depth to saturated zone	0.04
OkA:				
Okeetee	Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Slow water movement	1.00	Flooding	0.40
	Seepage, bottom layer	1.00		
OrA:				
Orangeburg	Somewhat limited		Somewhat limited	
	Slow water movement	0.32	Seepage	0.68
OrB:				
Orangeburg	Somewhat limited		Somewhat limited	
	Slow water movement	0.32	Seepage	0.68
			Slope	0.32

Sewage Disposal—Continued

Map symbol and soil name	Septic tank absorption fields		Sewage lagoons	
	Rating class and limiting features	Value	Rating class and limiting features	Value
OsB2:				
Orangeburg	Somewhat limited		Somewhat limited	
	Slow water movement	0.32	Seepage	0.68
			Slope	0.32
PaA:				
Paxville	Very limited		Very limited	
	Flooding	1.00	Flooding	1.00
	Depth to saturated zone	1.00	Seepage	1.00
	Seepage, bottom layer	1.00	Depth to saturated zone	1.00
PeA:				
Pelion	Very limited		Very limited	
	Depth to saturated zone	1.00	Seepage	1.00
	Slow water movement	1.00	Depth to saturated zone	0.60
	Seepage, bottom layer	1.00		
PeB:				
Pelion	Very limited		Very limited	
	Depth to saturated zone	1.00	Seepage	1.00
	Slow water movement	1.00	Depth to saturated zone	0.68
	Seepage, bottom layer	1.00	Slope	0.08
PtD:				
Pits	Not rated		Not rated	
Udorthents	Not rated		Not rated	
RaA:				
Rains	Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Slow water movement	0.32	Seepage	0.68
SmA:				
Smithboro	Very limited		Very limited	
	Slow water movement	1.00	Depth to saturated zone	1.00
	Depth to saturated zone	1.00		
StA:				
State	Very limited		Very limited	
	Depth to saturated zone	1.00	Seepage	1.00
	Seepage, bottom layer	1.00	Depth to saturated zone	0.99
	Flooding	0.40	Flooding	0.40

Sewage Disposal—Continued

Map symbol and soil name	Septic tank absorption fields		Sewage lagoons	
	Rating class and limiting features	Value	Rating class and limiting features	Value
Eunola	Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Seepage, bottom layer	1.00	Seepage	1.00
	Flooding	0.40	Flooding	0.40
ThA:				
Thursa	Somewhat limited		Somewhat limited	
	Slow water movement	0.32	Seepage	0.68
ThB:				
Thursa	Somewhat limited		Somewhat limited	
	Slow water movement	0.32	Seepage	0.68
			Slope	0.08
TrB:				
Troup	Somewhat limited		Very limited	
	Slow water movement	0.32	Seepage	1.00
			Slope	0.08
TrC:				
Troup	Somewhat limited		Very limited	
	Slow water movement	0.32	Seepage	1.00
			Slope	1.00
	Slope	0.01		
UdD:				
Udorthents, refuse substratum	Not rated		Not rated	
Pits	Not rated		Not rated	
VaC:				
Vaucluse	Very limited		Very limited	
	Seepage, bottom layer	1.00	Slope	1.00
			Seepage	1.00
	Slope	0.01		
WaB:				
Wagram	Somewhat limited		Very limited	
	Slow water movement	0.32	Seepage	1.00

Landfills

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. See text for further explanation of ratings in this table.)

Map symbol and soil name	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
AaB:						
Ailey	Very limited		Very limited		Very limited	
	Too sandy	1.00	Seepage	1.00	Too sandy	1.00
					Seepage	1.00
Barnwell	Somewhat limited		Very limited		Somewhat limited	
	Depth to saturated zone	0.04	Seepage	1.00	Seepage	0.21
AcC:						
Ailey	Very limited		Very limited		Very limited	
	Too sandy	1.00	Seepage	1.00	Too sandy	1.00
	Slope	0.01	Slope	0.01	Seepage	1.00
					Slope	0.01
Troup	Very limited		Very limited		Very limited	
	Too sandy	1.00	Seepage	1.00	Too sandy	1.00
	Slope	0.01	Slope	0.01	Seepage	1.00
					Slope	0.01
Vaucluse	Very limited		Very limited		Somewhat limited	
	Seepage, bottom layer	1.00	Seepage	1.00	Slope	0.01
	Slope	0.01	Slope	0.01		
AeD:						
Ailey	Very limited		Very limited		Very limited	
	Too sandy	1.00	Seepage	1.00	Too sandy	1.00
	Slope	0.63	Slope	0.63	Seepage	1.00
					Slope	0.63
Vaucluse	Very limited		Very limited		Somewhat limited	
	Seepage, bottom layer	1.00	Seepage	1.00	Slope	0.63
	Slope	0.63	Slope	0.63		
Troup	Very limited		Very limited		Very limited	
	Too sandy	1.00	Seepage	1.00	Too sandy	1.00
	Slope	0.63	Slope	0.63	Seepage	1.00
					Slope	0.63
AgB:						
Alaga	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Too sandy	1.00
	Seepage, bottom layer	1.00	Seepage	1.00	Seepage	1.00
	Too sandy	1.00				
AoB:						
Alaga	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Seepage	1.00
	Seepage, bottom layer	1.00	Seepage	1.00	Too sandy	0.50
	Too sandy	0.50	Flooding	0.40		

Landfills—Continued

Map symbol and soil name	Trench sanitary landfill: Rating class and limiting features	Value	Area sanitary landfill: Rating class and limiting features	Value	Daily cover for landfill: Rating class and limiting features	Value
Lucknow-------------	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Too sandy	1.00
					Seepage	1.00
	Too sandy	1.00	Seepage	1.00		
	Flooding	0.40	Flooding	0.40		
ApB:						
Alpin---------------	Very limited		Very limited		Very limited	
	Too sandy	1.00	Seepage	1.00	Too sandy	1.00
	Seepage, bottom layer	1.00			Seepage	0.50
ApD:						
Alpin---------------	Very limited		Very limited		Very limited	
	Too sandy	1.00	Seepage	1.00	Too sandy	1.00
	Seepage, bottom layer	1.00	Slope	0.16	Seepage	1.00
					Slope	0.16
	Slope	0.16				
AuB:						
Autryville----------	Very limited		Very limited		Not limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00		
			Seepage	1.00		
BaB:						
Barnwell------------	Somewhat limited		Very limited		Somewhat limited	
	Depth to saturated zone	0.04	Seepage	1.00	Seepage	0.21
BbB2:						
Barnwell------------	Somewhat limited		Very limited		Somewhat limited	
	Depth to saturated zone	0.04	Seepage	1.00	Seepage	0.21
BcC:						
Barnwell------------	Somewhat limited		Very limited		Somewhat limited	
	Depth to saturated zone	0.04	Seepage	1.00	Seepage	0.21
			Slope	0.01	Slope	0.01
	Slope	0.01				
Cowarts-------------	Somewhat limited		Somewhat limited		Somewhat limited	
	Slope	0.01	Slope	0.01	Slope	0.01
Troup---------------	Very limited		Very limited		Very limited	
	Too sandy	1.00	Seepage	1.00	Too sandy	1.00
	Slope	0.01	Slope	0.01	Seepage	1.00
					Slope	0.01
BoB:						
Bonneau-------------	Very limited		Very limited		Not limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00		
			Seepage	1.00		
BuA:						
Butters-------------	Very limited		Very limited		Not limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00		
			Seepage	1.00		

Landfills—Continued

Map symbol and soil name	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
CaB:						
Candor---------------	Very limited		Very limited		Very limited	
	Too sandy	1.00	Seepage	1.00	Too sandy	1.00
					Seepage	1.00
CcA:						
Chastain-------------	Very limited		Very limited		Very limited	
	Flooding	1.00	Flooding	1.00	Depth to saturated zone	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Too clayey	1.00
	Seepage, bottom layer	1.00			Hard to compact	1.00
Chewacla-------------	Very limited		Very limited		Very limited	
	Flooding	1.00	Flooding	1.00	Depth to saturated zone	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00		
	Seepage, bottom layer	1.00				
ChA:						
Chewacla-------------	Very limited		Very limited		Very limited	
	Flooding	1.00	Flooding	1.00	Depth to saturated zone	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00		
	Seepage, bottom layer	1.00				
Chastain-------------	Very limited		Very limited		Very limited	
	Flooding	1.00	Flooding	1.00	Depth to saturated zone	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Too clayey	1.00
	Seepage, bottom layer	1.00			Hard to compact	1.00
CwD:						
Cowarts--------------	Somewhat limited		Somewhat limited		Somewhat limited	
	Slope	0.63	Slope	0.63	Slope	0.63
CxA:						
Coxville-------------	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Too clayey	0.50				
DaA:						
Dorovan--------------	Very limited		Very limited		Very limited	
	Flooding	1.00	Flooding	1.00	Depth to saturated zone	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Organic matter content	1.00
	Seepage, bottom layer	1.00				
DoA:						
Dothan---------------	Somewhat limited		Not limited		Not limited	
	Depth to saturated zone	0.02				

Landfills—Continued

Map symbol and soil name	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
DoB:						
Dothan	Somewhat limited		Not limited		Not limited	
	Depth to saturated zone	0.01				
DtB2:						
Dothan	Somewhat limited		Not limited		Not limited	
	Depth to saturated zone	0.01				
EuA:						
Eunola	Very limited		Very limited		Somewhat limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	0.95
	Seepage, bottom layer	1.00	Flooding	0.40		
	Flooding	0.40				
FaA, FaB:						
Faceville	Somewhat limited		Not limited		Somewhat limited	
	Too clayey	0.50			Too clayey	0.50
FbB2:						
Faceville	Somewhat limited		Not limited		Somewhat limited	
	Too clayey	0.50			Too clayey	0.50
FoB:						
Foxworth	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Too sandy	1.00
	Seepage, bottom layer	1.00	Seepage	1.00	Seepage	1.00
	Too sandy	1.00				
duB:						
Fuquay	Very limited		Very limited		Very limited	
	Too sandy	1.00	Seepage	1.00	Too sandy	1.00
					Seepage	1.00
GoA:						
Goldsboro	Very limited		Very limited		Somewhat limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	0.94
JhA:						
Johns	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Too sandy	1.00
	Seepage, bottom layer	1.00	Seepage	1.00	Seepage	1.00
	Too sandy	1.00	Flooding	0.40	Depth to saturated zone	0.91
JoA:						
Johnston	Very limited		Very limited		Very limited	
	Flooding	1.00	Flooding	1.00	Depth to saturated zone	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Too sandy	1.00
	Seepage, bottom layer	1.00	Seepage	1.00	Seepage	1.00

Landfills—Continued

Map symbol and soil name	Trench sanitary landfill: Rating class and limiting features	Value	Area sanitary landfill: Rating class and limiting features	Value	Daily cover for landfill: Rating class and limiting features	Value
JzA:						
Johnston	Very limited		Very limited		Very limited	
	Flooding	1.00	Flooding	1.00	Depth to saturated zone	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Too sandy	1.00
	Seepage, bottom layer	1.00	Seepage	1.00	Seepage	1.00
Mouzon	Very limited		Very limited		Very limited	
	Flooding	1.00	Flooding	1.00	Depth to saturated zone	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Seepage	1.00
	Seepage, bottom layer	1.00			Too sandy	0.50
KaA:						
Kalmia	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Too sandy	1.00
	Seepage, bottom layer	1.00	Seepage	1.00	Seepage	1.00
			Flooding	0.40		
	Too sandy	1.00				
LaB:						
Lakeland	Very limited		Very limited		Very limited	
	Seepage, bottom layer	1.00	Seepage	1.00	Too sandy	1.00
					Seepage	1.00
	Too sandy	1.00				
LaD:						
Lakeland	Very limited		Very limited		Very limited	
	Seepage, bottom layer	1.00	Seepage	1.00	Too sandy	1.00
			Slope	0.37	Seepage	1.00
	Too sandy	1.00			Slope	0.37
	Slope	0.37				
LbB:						
Lucknow	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Too sandy	1.00
					Seepage	1.00
	Too sandy	1.00	Seepage	1.00		
LcB:						
Lucy	Not limited		Very limited		Not limited	
			Seepage	1.00		
LuA:						
Lumbee	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Seepage, bottom layer	1.00	Seepage	1.00	Too sandy	1.00
			Flooding	0.40	Seepage	1.00
	Too sandy	1.00				
LyA:						
Lynchburg	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00

Landfills—Continued

Map symbol and soil name	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
MaA, MaB:						
Marvyn	Very limited		Not limited		Not limited	
	Seepage, bottom layer	1.00				
MeA:						
Meggett	Very limited		Very limited		Very limited	
	Flooding	1.00	Flooding	1.00	Depth to saturated zone	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Too clayey	1.00
	Too clayey	1.00				
MyA:						
Myatt	Very limited		Very limited		Very limited	
	Flooding	1.00	Flooding	1.00	Depth to saturated zone	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Too clayey	0.50
	Seepage, bottom layer	1.00				
Paxville	Very limited		Very limited		Very limited	
	Flooding	1.00	Flooding	1.00	Depth to saturated zone	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00		
	Seepage, bottom layer	1.00				
NaB2:						
Nankin	Somewhat limited		Not limited		Somewhat limited	
	Too clayey	0.50			Too clayey	0.50
NbC:						
Nankin	Somewhat limited		Somewhat limited		Somewhat limited	
	Too clayey	0.50	Slope	0.01	Slope	0.01
	Slope	0.01				
Lucy	Somewhat limited		Very limited		Somewhat limited	
	Slope	0.01	Seepage	1.00	Slope	0.01
			Slope	0.01		
NbD:						
Nankin	Somewhat limited		Somewhat limited		Somewhat limited	
	Too clayey	0.50	Slope	0.37	Slope	0.37
	Slope	0.37				
Lucy	Somewhat limited		Very limited		Somewhat limited	
	Slope	0.37	Seepage	1.00	Slope	0.37
			Slope	0.37		
NeB:						
Noboco	Very limited		Very limited		Somewhat limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	0.05
NmB2:						
Noboco	Very limited		Very limited		Somewhat limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	0.05

Landfills—Continued

Map symbol and soil name	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
NnA:						
Noboco	Very limited		Very limited		Somewhat limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	0.11
Goldsboro	Very limited		Very limited		Somewhat limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	0.94
NoA, NoB:						
Norfolk	Very limited		Very limited		Not limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00		
OkA:						
Okeetee	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Too clayey	1.00	Flooding	0.40	Too clayey	1.00
	Seepage, bottom layer	1.00				
OrA, OrB:						
Orangeburg	Somewhat limited		Not limited		Not limited	
	Too clayey	0.50				
OsB2:						
Orangeburg	Somewhat limited		Not limited		Not limited	
	Too clayey	0.50				
PaA:						
Paxville	Very limited		Very limited		Very limited	
	Flooding	1.00	Flooding	1.00	Depth to saturated zone	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00		
	Seepage, bottom layer	1.00				
PeA:						
Pelion	Very limited		Somewhat limited		Somewhat limited	
	Seepage, bottom layer	1.00	Depth to saturated zone	0.60	Depth to saturated zone	0.78
	Depth to saturated zone	0.99			Seepage	0.50
	Too clayey	0.50				
PeB:						
Pelion	Very limited		Somewhat limited		Somewhat limited	
	Seepage, bottom layer	1.00	Depth to saturated zone	0.68	Depth to saturated zone	0.82
	Depth to saturated zone	0.99			Seepage	0.50
	Too clayey	0.50				
PtD:						
Pits	Not rated		Not limited		Not rated	
Udorthents	Not rated		Not limited		Not rated	

Landfills—Continued

Map symbol and soil name	Trench sanitary landfill: Rating class and limiting features	Value	Area sanitary landfill: Rating class and limiting features	Value	Daily cover for landfill: Rating class and limiting features	Value
RaA:						
Rains	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
SmA:						
Smithboro	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Too clayey	0.50			Too clayey	0.50
StA:						
State	Very limited		Very limited		Not limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00		
	Seepage, bottom layer	1.00	Flooding	0.40		
	Flooding	0.40				
Eunola	Very limited		Very limited		Somewhat limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	0.95
	Seepage, bottom layer	1.00	Flooding	0.40		
	Flooding	0.40				
ThA:						
Thursa	Not limited		Not limited		Not limited	
ThB:						
Thursa	Somewhat limited		Not limited		Not limited	
	Too clayey	0.50				
TrB:						
Troup	Very limited		Very limited		Very limited	
	Too sandy	1.00	Seepage	1.00	Too sandy	1.00
					Seepage	1.00
TrC:						
Troup	Very limited		Very limited		Very limited	
	Too sandy	1.00	Seepage	1.00	Too sandy	1.00
	Slope	0.01	Slope	0.01	Seepage	1.00
					Slope	0.01
UdD:						
Udorthents, refuse substratum	Not rated		Somewhat limited		Not rated	
			Slope	0.16		
Pits	Not rated		Not limited		Not rated	
VaC:						
Vaucluse	Very limited		Very limited		Somewhat limited	
	Seepage, bottom layer	1.00	Seepage	1.00	Slope	0.01
	Slope	0.01	Slope	0.01		
WaB:						
Wagram	Not limited		Very limited		Not limited	
			Seepage	1.00		

Source of Gravel and Sand

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The ratings given for the thickest layer are for the thickest layer above and excluding the bottom layer. The numbers in the value columns range from 0.00 to 0.99. The greater the value, the greater the likelihood that the bottom layer or thickest layer of the soil is a source of sand or gravel. See text for further explanation of ratings in this table.)

Map symbol and soil name	Potential source of gravel		Potential source of sand	
	Rating class	Value	Rating class	Value
AaB:				
Ailey	Poor		Fair	
	Bottom layer	0.00	Thickest layer	0.09
	Thickest layer	0.00	Bottom layer	0.09
Barnwell	Poor		Fair	
	Bottom layer	0.00	Thickest layer	0.00
	Thickest layer	0.00	Bottom layer	0.03
AcC:				
Ailey	Poor		Fair	
	Bottom layer	0.00	Thickest layer	0.09
	Thickest layer	0.00	Bottom layer	0.09
Troup	Poor		Fair	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.58
Vaucluse	Poor		Fair	
	Bottom layer	0.00	Thickest layer	0.00
	Thickest layer	0.00	Bottom layer	0.04
AeD:				
Ailey	Poor		Fair	
	Bottom layer	0.00	Thickest layer	0.09
	Thickest layer	0.00	Bottom layer	0.09
Vaucluse	Poor		Fair	
	Bottom layer	0.00	Thickest layer	0.00
	Thickest layer	0.00	Bottom layer	0.04
Troup	Poor		Fair	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.58
AgB:				
Alaga	Poor		Fair	
	Bottom layer	0.00	Thickest layer	0.14
	Thickest layer	0.00	Bottom layer	0.16
AoB:				
Alaga	Poor		Good	
	Bottom layer	0.00	Thickest layer	0.13
	Thickest layer	0.00		
Lucknow	Poor		Fair	
	Bottom layer	0.00	Bottom layer	0.05
	Thickest layer	0.00	Thickest layer	0.22
ApB:				
Alpin	Poor		Fair	
	Bottom layer	0.00	Bottom layer	0.39
	Thickest layer	0.00	Thickest layer	0.72

Source of Gravel and Sand—Continued

Map symbol and soil name	Potential source of gravel		Potential source of sand	
	Rating class	Value	Rating class	Value
ApD:				
Alpin	Poor		Fair	
	Bottom layer	0.00	Thickest layer	0.28
	Thickest layer	0.00	Bottom layer	0.39
AuB:				
Autryville	Poor		Fair	
	Bottom layer	0.00	Bottom layer	0.06
	Thickest layer	0.00	Thickest layer	0.14
BaB:				
Barnwell	Poor		Fair	
	Bottom layer	0.00	Thickest layer	0.00
	Thickest layer	0.00	Bottom layer	0.03
BbB2:				
Barnwell	Poor		Fair	
	Bottom layer	0.00	Thickest layer	0.00
	Thickest layer	0.00	Bottom layer	0.03
BcC:				
Barnwell	Poor		Fair	
	Bottom layer	0.00	Thickest layer	0.00
	Thickest layer	0.00	Bottom layer	0.03
Cowarts	Poor		Fair	
	Bottom layer	0.00	Thickest layer	0.00
	Thickest layer	0.00	Bottom layer	0.07
Troup	Poor		Fair	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.58
BoB:				
Bonneau	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00
BuA:				
Butters	Poor		Fair	
	Bottom layer	0.00	Bottom layer	0.09
	Thickest layer	0.00	Thickest layer	0.27
CaB:				
Candor	Poor		Fair	
	Bottom layer	0.00	Bottom layer	0.08
	Thickest layer	0.00	Thickest layer	0.49
CcA:				
Chastain	Poor		Fair	
	Bottom layer	0.00	Thickest layer	0.00
	Thickest layer	0.00	Bottom layer	0.42
Chewacla	Poor		Fair	
	Bottom layer	0.00	Thickest layer	0.00
	Thickest layer	0.00	Bottom layer	0.06
ChA:				
Chewacla	Poor		Fair	
	Bottom layer	0.00	Thickest layer	0.00
	Thickest layer	0.00	Bottom layer	0.06

Source of Gravel and Sand—Continued

Map symbol and soil name	Potential source of gravel		Potential source of sand	
	Rating class	Value	Rating class	Value
Chastain------------	Poor		Fair	
	Bottom layer	0.00	Thickest layer	0.00
	Thickest layer	0.00	Bottom layer	0.42
CwD:				
Cowarts-------------	Poor		Fair	
	Bottom layer	0.00	Thickest layer	0.00
	Thickest layer	0.00	Bottom layer	0.07
CxA:				
Coxville------------	Poor		Fair	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.03
DaA:				
Dorovan-------------	Poor		Good	
	Bottom layer	0.00	Thickest layer	0.10
	Thickest layer	0.00		
DoA, DoB:				
Dothan--------------	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00
DtB2:				
Dothan--------------	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00
EuA:				
Eunola--------------	Poor		Fair	
	Bottom layer	0.00	Thickest layer	0.00
	Thickest layer	0.00	Bottom layer	0.07
FaA, FaB:				
Faceville-----------	Poor		Fair	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.16
FbB2:				
Faceville-----------	Poor		Fair	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.07
FoB:				
Foxworth------------	Poor		Fair	
	Bottom layer	0.00	Bottom layer	0.68
	Thickest layer	0.00	Thickest layer	0.68
FuB:				
Fuquay--------------	Poor		Fair	
	Bottom layer	0.00	Bottom layer	0.04
	Thickest layer	0.00	Thickest layer	0.23
GoA:				
Goldsboro-----------	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00

Source of Gravel and Sand—Continued

Map symbol and soil name	Potential source of gravel		Potential source of sand	
	Rating class	Value	Rating class	Value
JhA:				
Johns---------------	Poor		Fair	
	Bottom layer	0.00	Thickest layer	0.00
	Thickest layer	0.00	Bottom layer	0.86
JoA:				
Johnston------------	Poor		Fair	
	Bottom layer	0.00	Thickest layer	0.05
	Thickest layer	0.00	Bottom layer	0.19
JzA:				
Johnston------------	Poor		Fair	
	Bottom layer	0.00	Thickest layer	0.05
	Thickest layer	0.00	Bottom layer	0.19
Mouzon--------------	Poor		Fair	
	Bottom layer	0.00	Thickest layer	0.00
	Thickest layer	0.00	Bottom layer	0.10
KaA:				
Kalmia--------------	Poor		Good	
	Bottom layer	0.00	Thickest layer	0.00
	Thickest layer	0.00		
LaB:				
Lakeland------------	Poor		Fair	
	Bottom layer	0.00	Bottom layer	0.75
	Thickest layer	0.00	Thickest layer	0.75
LaD:				
Lakeland------------	Poor		Fair	
	Bottom layer	0.00	Thickest layer	0.64
	Thickest layer	0.00	Bottom layer	0.75
LbB:				
Lucknow-------------	Poor		Fair	
	Bottom layer	0.00	Bottom layer	0.05
	Thickest layer	0.00	Thickest layer	0.22
LcB:				
Lucy----------------	Poor		Fair	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.57
LuA:				
Lumbee--------------	Poor		Fair	
	Bottom layer	0.00	Thickest layer	0.02
	Thickest layer	0.00	Bottom layer	0.57
LyA:				
Lynchburg-----------	Poor		Fair	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.04
MaA, MaB:				
Marvyn--------------	Poor		Fair	
	Bottom layer	0.00	Thickest layer	0.00
	Thickest layer	0.00	Bottom layer	0.04

Source of Gravel and Sand—Continued

Map symbol and soil name	Potential source of gravel		Potential source of sand	
	Rating class	Value	Rating class	Value
MeA:				
Meggett-------------	Poor		Fair	
	Bottom layer	0.00	Thickest layer	0.00
	Thickest layer	0.00	Bottom layer	0.91
MyA:				
Myatt---------------	Poor		Fair	
	Bottom layer	0.00	Thickest layer	0.00
	Thickest layer	0.00	Bottom layer	0.10
Paxville------------	Poor		Fair	
	Bottom layer	0.00	Thickest layer	0.00
	Thickest layer	0.00	Bottom layer	0.57
NaB2:				
Nankin--------------	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00
NbC, NbD:				
Nankin--------------	Poor		Fair	
	Bottom layer	0.00	Thickest layer	0.00
	Thickest layer	0.00	Bottom layer	0.09
Lucy----------------	Poor		Fair	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.57
NeB:				
Noboco--------------	Poor		Fair	
	Bottom layer	0.00	Thickest layer	0.00
	Thickest layer	0.00	Bottom layer	0.06
NmB2:				
Noboco--------------	Poor		Fair	
	Bottom layer	0.00	Thickest layer	0.00
	Thickest layer	0.00	Bottom layer	0.06
NnA:				
Noboco--------------	Poor		Fair	
	Bottom layer	0.00	Thickest layer	0.00
	Thickest layer	0.00	Bottom layer	0.06
Goldsboro-----------	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00
NoA:				
Norfolk-------------	Poor		Fair	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.11
NoB:				
Norfolk-------------	Poor		Fair	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.12
OkA:				
Okeetee-------------	Poor		Fair	
	Bottom layer	0.00	Thickest layer	0.00
	Thickest layer	0.00	Bottom layer	0.04

Source of Gravel and Sand—Continued

Map symbol and soil name	Potential source of gravel		Potential source of sand	
	Rating class	Value	Rating class	Value
OrA, OrB:				
Orangeburg----------	Poor		Fair	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.10
OsB2:				
Orangeburg----------	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00
PaA:				
Paxville------------	Poor		Fair	
	Bottom layer	0.00	Thickest layer	0.00
	Thickest layer	0.00	Bottom layer	0.57
PeA, PeB:				
Pelion--------------	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00
PtD:				
Pits----------------	Not rated		Not rated	
Udorthents----------	Not rated		Not rated	
RaA:				
Rains---------------	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00
SmA:				
Smithboro-----------	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00
StA:				
State---------------	Poor		Fair	
	Bottom layer	0.00	Thickest layer	0.00
	Thickest layer	0.00	Bottom layer	0.10
Eunola--------------	Poor		Fair	
	Bottom layer	0.00	Thickest layer	0.00
	Thickest layer	0.00	Bottom layer	0.07
ThA:				
Thursa--------------	Poor		Fair	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.04
ThB:				
Thursa--------------	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00
TrB, TrC:				
Troup---------------	Poor		Fair	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.58

Source of Gravel and Sand—Continued

Map symbol and soil name	Potential source of gravel		Potential source of sand	
	Rating class	Value	Rating class	Value
UdD:				
Udorthents, refuse substratum----------	Not rated		Not rated	
Pits----------------	Not rated		Not rated	
VaC:				
Vaucluse------------	Poor		Fair	
	Bottom layer	0.00	Thickest layer	0.00
	Thickest layer	0.00	Bottom layer	0.04
WaB:				
Wagram--------------	Poor		Fair	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.72

Source of Reclamation Material, Roadfill, and Topsoil

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.00 to 0.99. The smaller the value, the greater the limitation. See text for further explanation of ratings in this table.)

Map symbol and soil name	Potential source of reclamation material: Rating class and limiting features	Value	Potential source of roadfill: Rating class and limiting features	Value	Potential source of topsoil: Rating class and limiting features	Value
AaB:						
Ailey	Poor		Good		Poor	
	Too sandy	0.00			Too sandy	0.00
	Wind erosion	0.00			Hard to reclaim (dense layer)	0.65
	Droughty	0.00				
Barnwell	Poor		Good		Poor	
	Wind erosion	0.00			Hard to reclaim (dense layer)	0.00
	Too acid	0.12			Too clayey	0.51
	Organic matter content low	0.12			Too acid	0.59
AcC:						
Ailey	Poor		Good		Poor	
	Too sandy	0.00			Too sandy	0.00
	Wind erosion	0.00			Hard to reclaim (dense layer)	0.65
	Droughty	0.00				
Troup	Poor		Good		Poor	
	Too sandy	0.00			Too sandy	0.00
	Wind erosion	0.00			Too acid	0.76
	Organic matter content low	0.18				
Vaucluse	Poor		Good		Poor	
	Wind erosion	0.00			Hard to reclaim (dense layer)	0.00
	Droughty	0.00			Too acid	0.59
	Too acid	0.03				
AeD:						
Ailey	Poor		Good		Poor	
	Too sandy	0.00			Too sandy	0.00
	Wind erosion	0.00			Slope	0.37
	Droughty	0.00			Hard to reclaim (dense layer)	0.65
Vaucluse	Poor		Good		Poor	
	Wind erosion	0.00			Hard to reclaim (dense layer)	0.00
	Droughty	0.00			Slope	0.37
	Too acid	0.03			Too acid	0.59
Troup	Poor		Good		Poor	
	Too sandy	0.00			Too sandy	0.00
	Wind erosion	0.00			Slope	0.37
	Organic matter content low	0.18			Too acid	0.76
AgB:						
Alaga	Poor		Good		Fair	
	Wind erosion	0.00			Too sandy	0.06
	Too sandy	0.06			Too acid	0.92
	Organic matter content low	0.12				

Source of Reclamation Material, Roadfill, and Topsoil—Continued

Map symbol and soil name	Potential source of reclamation material: Rating class and limiting features	Value	Potential source of roadfill: Rating class and limiting features	Value	Potential source of topsoil: Rating class and limiting features	Value
AoB:						
Alaga	Poor		Good		Poor	
	Wind erosion	0.00			Too sandy	0.00
	Too sandy	0.00			Too acid	0.99
	Organic matter content low	0.12				
Lucknow	Poor		Good		Poor	
	Too sandy	0.00			Too sandy	0.00
	Wind erosion	0.00			Too acid	0.68
	Organic matter content low	0.08				
ApB:						
Alpin	Poor		Good		Poor	
	Too sandy	0.00			Too sandy	0.00
	Wind erosion	0.00			Too acid	0.68
	Droughty	0.11				
ApD:						
Alpin	Poor		Good		Poor	
	Too sandy	0.00			Too sandy	0.00
	Wind erosion	0.00			Too acid	0.68
	Organic matter content low	0.08			Slope	0.84
AuB:						
Autryville	Poor		Good		Poor	
	Too sandy	0.00			Too sandy	0.00
	Wind erosion	0.00			Too acid	0.98
	Organic matter content low	0.08				
BaB:						
Barnwell	Poor		Good		Poor	
	Wind erosion	0.00			Hard to reclaim (dense layer)	0.00
	Too acid	0.12			Too clayey	0.51
	Organic matter content low	0.12			Too acid	0.59
BbB2:						
Barnwell	Fair		Good		Fair	
	Organic matter content low	0.12			Too clayey	0.51
	Too acid	0.16			Too acid	0.68
	Too clayey	0.88				
BcC:						
Barnwell	Poor		Good		Poor	
	Wind erosion	0.00			Hard to reclaim (dense layer)	0.00
	Too acid	0.12			Too clayey	0.51
	Organic matter content low	0.12			Too acid	0.59
Cowarts	Poor		Good		Fair	
	Wind erosion	0.00			Too clayey	0.51
	Organic matter content low	0.12			Too acid	0.92
	Droughty	0.23				

Source of Reclamation Material, Roadfill, and Topsoil—Continued

Map symbol and soil name	Potential source of reclamation material: Rating class and limiting features	Value	Potential source of roadfill: Rating class and limiting features	Value	Potential source of topsoil: Rating class and limiting features	Value
Troup---------------	Poor		Good		Poor	
	Too sandy	0.00			Too sandy	0.00
	Wind erosion	0.00			Too acid	0.76
	Organic matter content low	0.18				
BoB:						
Bonneau-------------	Poor		Good		Poor	
	Too sandy	0.00			Too sandy	0.00
	Wind erosion	0.00				
	Organic matter content low	0.12				
BuA:						
Butters-------------	Poor		Good		Fair	
	Wind erosion	0.00			Too acid	0.82
	Organic matter content low	0.12			Too sandy	0.98
	Too acid	0.20				
CaB:						
Candor--------------	Poor		Good		Poor	
	Too sandy	0.00			Too sandy	0.00
	Wind erosion	0.00			Too acid	0.92
	Too acid	0.08				
CcA:						
Chastain------------	Poor		Poor		Poor	
	Too clayey	0.00	Wetness depth	0.00	Wetness depth	0.00
	Too acid	0.20	Low strength	0.00	Too clayey	0.00
	Organic matter content low	0.50			Too acid	0.76
Chewacla------------	Fair		Poor		Poor	
	Too acid	0.32	Wetness depth	0.00	Wetness depth	0.00
	Organic matter content low	0.50	Low strength	0.00	Too acid	0.88
ChA:						
Chewacla------------	Fair		Poor		Poor	
	Too acid	0.32	Wetness depth	0.00	Wetness depth	0.00
	Organic matter content low	0.50	Low strength	0.00	Too acid	0.88
Chastain------------	Poor		Poor		Poor	
	Too clayey	0.00	Wetness depth	0.00	Wetness depth	0.00
	Too acid	0.20	Low strength	0.00	Too clayey	0.00
	Organic matter content low	0.50			Too acid	0.76
CwD:						
Cowarts-------------	Poor		Good		Fair	
	Wind erosion	0.00			Slope	0.37
	Organic matter content low	0.12			Too clayey	0.51
					Too acid	0.92
	Droughty	0.23				

Source of Reclamation Material, Roadfill, and Topsoil—Continued

Map symbol and soil name	Potential source of reclamation material: Rating class and limiting features	Value	Potential source of roadfill: Rating class and limiting features	Value	Potential source of topsoil: Rating class and limiting features	Value
CxA:						
Coxville	Poor		Poor		Poor	
	Too clayey	0.00	Wetness depth	0.00	Wetness depth	0.00
	Too acid	0.50	Low strength	0.10	Too clayey	0.00
	Organic matter content low	0.50			Too acid	0.59
DaA:						
Dorovan	Fair		Poor		Poor	
	Too acid	0.16	Wetness depth	0.00	Wetness depth	0.00
	Too sandy	0.98			Organic matter content low	0.22
					Too acid	0.68
DoA, DoB:						
Dothan	Poor		Good		Fair	
	Wind erosion	0.00			Too acid	0.59
	Organic matter content low	0.08				
	Too acid	0.50				
DtB2:						
Dothan	Fair		Good		Fair	
	Organic matter content low	0.08			Too acid	0.59
	Too acid	0.50				
	Droughty	0.85				
EuA:						
Eunola	Fair		Fair		Fair	
	Organic matter content low	0.08	Wetness depth	0.32	Wetness depth	0.32
	Too acid	0.20			Too acid	0.76
FaA:						
Faceville	Poor		Fair		Poor	
	Wind erosion	0.00	Low strength	0.10	Too clayey	0.00
	Too clayey	0.00			Too acid	0.88
	Organic matter content low	0.08				
FaB:						
Faceville	Poor		Fair		Poor	
	Wind erosion	0.00	Low strength	0.22	Too clayey	0.00
	Too clayey	0.00			Too acid	0.88
	Organic matter content low	0.08				
FbB2:						
Faceville	Poor		Fair		Poor	
	Too clayey	0.00	Low strength	0.10	Too clayey	0.00
	Organic matter content low	0.08			Too acid	0.88
	Too acid	0.50				

Source of Reclamation Material, Roadfill, and Topsoil—Continued

Map symbol and soil name	Potential source of reclamation material: Rating class and limiting features	Value	Potential source of roadfill: Rating class and limiting features	Value	Potential source of topsoil: Rating class and limiting features	Value
FoB:						
Foxworth	Poor		Good		Poor	
	Too sandy	0.00			Too sandy	0.00
	Wind erosion	0.00			Too acid	0.50
	Organic matter content low	0.00				
FuB:						
Fuquay	Poor		Good		Poor	
	Wind erosion	0.00			Too sandy	0.00
	Too sandy	0.00			Too acid	0.32
	Too acid	0.01				
GoA:						
Goldsboro	Fair		Fair		Fair	
	Organic matter content low	0.02	Wetness depth	0.35	Wetness depth	0.35
	Too acid	0.50			Too acid	0.59
JhA:						
Johns	Poor		Fair		Fair	
	Wind erosion	0.00	Wetness depth	0.44	Wetness depth	0.44
	Organic matter content low	0.08			Too acid	0.76
	Too acid	0.50				
JoA:						
Johnston	Fair		Poor		Poor	
	Organic matter content low	0.32	Wetness depth	0.00	Wetness depth	0.00
					Too acid	0.68
	Too acid	0.50			Too sandy	0.70
	Too sandy	0.70				
JzA:						
Johnston	Fair		Poor		Poor	
	Organic matter content low	0.32	Wetness depth	0.00	Wetness depth	0.00
					Too acid	0.68
	Too acid	0.50			Too sandy	0.70
	Too sandy	0.70				
Mouzon	Fair		Poor		Poor	
	Organic matter content low	0.08	Wetness depth	0.00	Wetness depth	0.00
	Too acid	0.74				
KaA:						
Kalmia	Poor		Good		Fair	
	Wind erosion	0.00			Too acid	0.95
	Organic matter content low	0.08				
	Too acid	0.50				
LaB:						
Lakeland	Poor		Good		Poor	
	Too sandy	0.00			Too sandy	0.00
	Wind erosion	0.00			Too acid	0.88
	Droughty	0.01				

Source of Reclamation Material, Roadfill, and Topsoil—Continued

Map symbol and soil name	Potential source of reclamation material		Potential source of roadfill		Potential source of topsoil	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
LaD:						
Lakeland------------	Poor		Good		Poor	
	Too sandy	0.00			Too sandy	0.00
	Wind erosion	0.00			Slope	0.63
	Droughty	0.01			Too acid	0.88
LbB:						
Lucknow-------------	Poor		Good		Poor	
	Too sandy	0.00			Too sandy	0.00
	Wind erosion	0.00			Too acid	0.68
	Organic matter content low	0.08				
LcB:						
Lucy----------------	Poor		Good		Fair	
	Wind erosion	0.00			Too acid	0.88
	Too acid	0.50				
	Organic matter content low	0.50				
LuA:						
Lumbee--------------	Fair		Poor		Poor	
	Organic matter content low	0.02	Wetness depth	0.00	Wetness depth	0.00
					Too acid	0.92
	Too acid	0.50				
	Droughty	0.99				
LyA:						
Lynchburg-----------	Fair		Fair		Fair	
	Organic matter content low	0.12	Wetness depth	0.01	Wetness depth	0.01
					Too acid	0.95
	Too acid	0.50				
MaA, MaB:						
Marvyn--------------	Poor		Good		Poor	
	Wind erosion	0.00			Hard to reclaim (dense layer)	0.00
	Organic matter content low	0.12				
					Too clayey	0.55
	Too acid	0.39			Too acid	0.92
MeA:						
Meggett-------------	Poor		Poor		Poor	
	Too clayey	0.00	Wetness depth	0.00	Wetness depth	0.00
	Organic matter content low	0.08	Low strength	0.00	Too clayey	0.00
			Shrink-swell	0.94		
	Too acid	0.46				
MyA:						
Myatt---------------	Poor		Poor		Poor	
	Too acid	0.00	Wetness depth	0.00	Wetness depth	0.00
	Organic matter content low	0.08	Low strength	0.00	Too clayey	0.40
					Too acid	0.41
	Too clayey	0.71				
Paxville------------	Poor		Poor		Poor	
	Too acid	0.00	Wetness depth	0.00	Wetness depth	0.00
	Organic matter content low	0.08			Too acid	0.24

Source of Reclamation Material, Roadfill, and Topsoil—Continued

Map symbol and soil name	Potential source of reclamation material		Potential source of roadfill		Potential source of topsoil	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
NaB2:						
Nankin	Poor		Good		Poor	
	Too clayey	0.00			Too clayey	0.00
	Organic matter content low	0.08				
	Too acid	0.74				
NbC:						
Nankin	Poor		Fair		Poor	
	Wind erosion	0.00	Low strength	0.10	Too clayey	0.00
	Too clayey	0.00			Too acid	0.76
	Organic matter content low	0.00				
Lucy	Poor		Good		Fair	
	Wind erosion	0.00			Too acid	0.88
	Too acid	0.50				
	Organic matter content low	0.50				
NbD:						
Nankin	Poor		Fair		Poor	
	Wind erosion	0.00	Low strength	0.10	Too clayey	0.00
	Too clayey	0.00			Slope	0.63
	Organic matter content low	0.00			Too acid	0.76
Lucy	Poor		Good		Fair	
	Wind erosion	0.00			Slope	0.63
	Too acid	0.50			Too acid	0.88
	Organic matter content low	0.50				
NeB:						
Noboco	Poor		Good		Fair	
	Wind erosion	0.00			Too acid	0.59
	Organic matter content low	0.12				
	Too acid	0.50				
NmB2:						
Noboco	Fair		Good		Fair	
	Organic matter content low	0.12			Too acid	0.59
	Too acid	0.50				
NnA:						
Noboco	Poor		Good		Fair	
	Wind erosion	0.00			Too acid	0.59
	Organic matter content low	0.12				
	Too acid	0.50				
Goldsboro	Fair		Fair		Fair	
	Organic matter content low	0.02	Wetness depth	0.35	Wetness depth	0.35
	Too acid	0.50			Too acid	0.59

Source of Reclamation Material, Roadfill, and Topsoil—Continued

Map symbol and soil name	Potential source of reclamation material		Potential source of roadfill		Potential source of topsoil	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
NoA, NoB:						
Norfolk-------------	Poor		Good		Fair	
	Wind erosion	0.00			Too acid	0.92
	Organic matter content low	0.12				
	Too acid	0.50				
OkA:						
Okeetee-------------	Poor		Poor		Poor	
	Too clayey	0.00	Wetness depth	0.00	Wetness depth	0.00
	Too acid	0.00	Low strength	0.00	Too clayey	0.00
	Organic matter content low	0.12	Shrink-swell	0.87	Too acid	0.88
OrA:						
Orangeburg----------	Poor		Fair		Fair	
	Wind erosion	0.00	Low strength	0.10	Too clayey	0.27
	Organic matter content low	0.02			Too acid	0.95
	Too acid	0.50				
OrB:						
Orangeburg----------	Poor		Fair		Fair	
	Wind erosion	0.00	Low strength	0.10	Too clayey	0.29
	Organic matter content low	0.12			Too acid	0.95
	Too acid	0.50				
OsB2:						
Orangeburg----------	Fair		Fair		Fair	
	Organic matter content low	0.12	Low strength	0.10	Too clayey	0.29
	Too acid	0.50			Too acid	0.95
	Too clayey	0.50				
PaA:						
Paxville------------	Poor		Poor		Poor	
	Too acid	0.00	Wetness depth	0.00	Wetness depth	0.00
	Organic matter content low	0.08			Too acid	0.24
PeA:						
Pelion--------------	Poor		Fair		Fair	
	Wind erosion	0.00	Wetness depth	0.65	Too acid	0.41
	Too acid	0.05			Too clayey	0.58
	Organic matter content low	0.12			Wetness depth	0.65
PeB:						
Pelion--------------	Poor		Fair		Fair	
	Wind erosion	0.00	Wetness depth	0.59	Too acid	0.41
	Too acid	0.05			Too clayey	0.58
	Organic matter content low	0.12			Wetness depth	0.59
PtD:						
Pits----------------	Not rated		Not rated		Not rated	
Udorthents----------	Not rated		Not rated		Not rated	

Source of Reclamation Material, Roadfill, and Topsoil—Continued

Map symbol and soil name	Potential source of reclamation material: Rating class and limiting features	Value	Potential source of roadfill: Rating class and limiting features	Value	Potential source of topsoil: Rating class and limiting features	Value
RaA:						
Rains	Fair		Poor		Poor	
	Too acid	0.50	Wetness depth	0.00	Wetness depth	0.00
	Organic matter content low	0.88			Too acid	0.59
SmA:						
Smithboro	Poor		Poor		Poor	
	Too clayey	0.00	Wetness depth	0.00	Too clayey	0.00
	Organic matter content low	0.12	Low strength	0.10	Wetness depth	0.00
			Shrink-swell	0.87	Too acid	0.59
	Too acid	0.50				
StA:						
State	Poor		Good		Fair	
	Wind erosion	0.00			Too acid	0.99
	Organic matter content low	0.08				
	Too acid	0.32				
Eunola	Fair		Fair		Fair	
	Organic matter content low	0.08	Wetness depth	0.32	Wetness depth	0.32
					Too acid	0.76
	Too acid	0.20				
ThA:						
Thursa	Poor		Fair		Fair	
	Wind erosion	0.00	Low strength	0.10	Too acid	0.95
	Organic matter content low	0.08				
	Too acid	0.46				
ThB:						
Thursa	Poor		Fair		Fair	
	Wind erosion	0.00	Low strength	0.10	Too clayey	0.50
	Organic matter content low	0.08			Too acid	0.98
	Too acid	0.39				
TrB, TrC:						
Troup	Poor		Good		Poor	
	Too sandy	0.00			Too sandy	0.00
	Wind erosion	0.00			Too acid	0.76
	Organic matter content low	0.18				
UdD:						
Udorthents, refuse substratum	Not rated		Not rated		Not rated	
Pits	Not rated		Not rated		Not rated	
VaC:						
Vaucluse	Poor		Good		Poor	
	Wind erosion	0.00			Hard to reclaim (dense layer)	0.00
	Droughty	0.00				
	Too acid	0.03			Too acid	0.59

Source of Reclamation Material, Roadfill, and Topsoil—Continued

Map symbol and soil name	Potential source of reclamation material		Potential source of roadfill		Potential source of topsoil	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
WaB:						
Wagram--------------	Poor		Good		Poor	
	Too sandy	0.00			Too sandy	0.00
	Wind erosion	0.00			Too acid	0.98
	Organic matter content low	0.12				

Ponds and Embankments

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. See text for further explanation of ratings in this table.)

Map symbol and soil name	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
AaB:						
Ailey	Very limited		Somewhat limited		Very limited	
	Seepage	1.00	Thin layer	0.86	Depth to water	1.00
			Seepage	0.57		
Barnwell	Very limited		Somewhat limited		Very limited	
	Seepage	1.00	Depth to saturated zone	0.03	Depth to water	1.00
			Seepage	0.03		
AcC:						
Ailey	Very limited		Somewhat limited		Very limited	
	Seepage	1.00	Thin layer	0.86	Depth to water	1.00
			Seepage	0.57		
Troup	Very limited		Somewhat limited		Very limited	
	Seepage	1.00	Seepage	0.58	Depth to water	1.00
Vaucluse	Very limited		Very limited		Very limited	
	Seepage	1.00	Thin layer	1.00	Depth to water	1.00
			Seepage	0.04		
AeD:						
Ailey	Very limited		Somewhat limited		Very limited	
	Seepage	1.00	Thin layer	0.86	Depth to water	1.00
	Slope	0.01	Seepage	0.57		
Vaucluse	Very limited		Very limited		Very limited	
	Seepage	1.00	Thin layer	1.00	Depth to water	1.00
	Slope	0.01	Seepage	0.04		
Troup	Very limited		Somewhat limited		Very limited	
	Seepage	1.00	Seepage	0.58	Depth to water	1.00
	Slope	0.01				
AgB:						
Alaga	Very limited		Somewhat limited		Very limited	
	Seepage	1.00	Seepage	0.16	Depth to water	1.00
AoB:						
Alaga	Very limited		Very limited		Very limited	
	Seepage	1.00	Seepage	1.00	Cutbanks cave	1.00
					Depth to saturated zone	0.98
Lucknow	Very limited		Somewhat limited		Very limited	
	Seepage	1.00	Seepage	0.22	Cutbanks cave	1.00
					Depth to saturated zone	0.98
					Slow refill	0.19
ApB:						
Alpin	Very limited		Somewhat limited		Very limited	
	Seepage	1.00	Seepage	0.72	Depth to water	1.00

Ponds and Embankments—Continued

Map symbol and soil name	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
ApD:						
Alpin----------------	Very limited		Somewhat limited		Very limited	
	Seepage	1.00	Seepage	0.39	Depth to water	1.00
AuB:						
Autryville-----------	Very limited		Somewhat limited		Very limited	
	Seepage	1.00	Seepage	0.14	Depth to water	1.00
					Slow refill	0.19
BaB:						
Barnwell-------------	Very limited		Somewhat limited		Very limited	
	Seepage	1.00	Depth to saturated zone	0.03	Depth to water	1.00
			Seepage	0.03		
BbB2:						
Barnwell-------------	Very limited		Somewhat limited		Very limited	
	Seepage	1.00	Depth to saturated zone	0.03	Depth to water	1.00
			Seepage	0.03		
BcC:						
Barnwell-------------	Very limited		Somewhat limited		Very limited	
	Seepage	1.00	Depth to saturated zone	0.03	Depth to water	1.00
			Seepage	0.03		
Cowarts--------------	Somewhat limited		Somewhat limited		Very limited	
	Seepage	0.81	Thin layer	0.73	Depth to water	1.00
			Seepage	0.07		
Troup----------------	Very limited		Somewhat limited		Very limited	
	Seepage	1.00	Seepage	0.58	Depth to water	1.00
BoB:						
Bonneau--------------	Very limited		Somewhat limited		Very limited	
	Seepage	1.00	Depth to saturated zone	0.01	Cutbanks cave	1.00
					Depth to saturated zone	0.70
					Slow refill	0.19
BuA:						
Butters--------------	Very limited		Somewhat limited		Very limited	
	Seepage	1.00	Seepage	0.27	Cutbanks cave	1.00
					Depth to saturated zone	0.98
					Slow refill	0.19
CaB:						
Candor---------------	Very limited		Somewhat limited		Very limited	
	Seepage	1.00	Seepage	0.64	Depth to water	1.00
CcA:						
Chastain-------------	Very limited		Very limited		Very limited	
	Seepage	1.00	Depth to saturated zone	1.00	Cutbanks cave	1.00
			Seepage	0.42		
			Piping	0.01		

Ponds and Embankments—Continued

Map symbol and soil name	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
Chewacla	Very limited		Very limited		Very limited	
	Seepage	1.00	Depth to saturated zone	1.00	Cutbanks cave	1.00
			Seepage	0.06		
ChA:						
Chewacla	Very limited		Very limited		Very limited	
	Seepage	1.00	Depth to saturated zone	1.00	Cutbanks cave	1.00
			Seepage	0.06		
Chastain	Very limited		Very limited		Very limited	
	Seepage	1.00	Depth to saturated zone	1.00	Cutbanks cave	1.00
			Seepage	0.42		
			Piping	0.01		
CwD:						
Cowarts	Somewhat limited		Somewhat limited		Very limited	
	Seepage	0.81	Thin layer	0.73	Depth to water	1.00
	Slope	0.01	Seepage	0.07		
CxA:						
Coxville	Somewhat limited		Very limited		Somewhat limited	
	Seepage	0.05	Depth to saturated zone	1.00	Slow refill	0.95
					Cutbanks cave	0.10
			Seepage	0.03		
DaA:						
Dorovan	Very limited		Very limited		Very limited	
	Seepage	1.00	Organic matter content	1.00	Cutbanks cave	1.00
			Depth to saturated zone	1.00		
			Seepage	1.00		
DoA:						
Dothan	Somewhat limited		Somewhat limited		Very limited	
	Seepage	0.81	Thin layer	0.61	Depth to water	1.00
			Depth to saturated zone	0.02		
DoB:						
Dothan	Somewhat limited		Somewhat limited		Very limited	
	Seepage	0.81	Thin layer	0.61	Depth to water	1.00
			Depth to saturated zone	0.01		
DtB2:						
Dothan	Somewhat limited		Somewhat limited		Very limited	
	Seepage	0.81	Thin layer	0.61	Depth to water	1.00
			Depth to saturated zone	0.01		
EuA:						
Eunola	Very limited		Very limited		Somewhat limited	
	Seepage	1.00	Depth to saturated zone	1.00	Cutbanks cave	0.10
			Seepage	0.07		

Ponds and Embankments—Continued

Map symbol and soil name	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
FaA, FaB:						
Faceville-----------	Somewhat limited		Somewhat limited		Very limited	
	Seepage	0.81	Piping	0.91	Depth to water	1.00
			Seepage	0.16		
FbB2:						
Faceville-----------	Somewhat limited		Somewhat limited		Very limited	
	Seepage	0.81	Piping	0.69	Depth to water	1.00
			Seepage	0.07		
FoB:						
Foxworth------------	Very limited		Somewhat limited		Very limited	
	Seepage	1.00	Seepage	0.68	Depth to water	1.00
FuB:						
Fuquay--------------	Very limited		Somewhat limited		Very limited	
	Seepage	1.00	Thin layer	0.37	Depth to water	1.00
			Seepage	0.23		
GoA:						
Goldsboro-----------	Somewhat limited		Very limited		Somewhat limited	
	Seepage	0.81	Depth to saturated zone	1.00	Slow refill	0.19
					Cutbanks cave	0.10
JhA:						
Johns---------------	Very limited		Very limited		Very limited	
	Seepage	1.00	Depth to saturated zone	1.00	Cutbanks cave	1.00
			Seepage	0.86		
JoA:						
Johnston------------	Very limited		Very limited		Very limited	
	Seepage	1.00	Depth to saturated zone	1.00	Cutbanks cave	1.00
			Seepage	0.19		
JzA:						
Johnston------------	Very limited		Very limited		Very limited	
	Seepage	1.00	Depth to saturated zone	1.00	Cutbanks cave	1.00
			Seepage	0.19		
Mouzon--------------	Very limited		Very limited		Very limited	
	Seepage	1.00	Depth to saturated zone	1.00	Cutbanks cave	1.00
			Seepage	0.10		
KaA:						
Kalmia--------------	Very limited		Very limited		Very limited	
	Seepage	1.00	Seepage	1.00	Cutbanks cave	1.00
					Depth to saturated zone	0.86
LaB:						
Lakeland------------	Very limited		Somewhat limited		Very limited	
	Seepage	1.00	Seepage	0.75	Depth to water	1.00

Ponds and Embankments—Continued

Map symbol and soil name	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
LaD:						
Lakeland	Very limited		Somewhat limited		Very limited	
	Seepage	1.00	Seepage	0.75	Depth to water	1.00
	Slope	0.01				
LbB:						
Lucknow	Very limited		Somewhat limited		Very limited	
	Seepage	1.00	Seepage	0.22	Cutbanks cave	1.00
					Depth to saturated zone	0.98
					Slow refill	0.19
LcB:						
Lucy	Very limited		Somewhat limited		Very limited	
	Seepage	1.00	Seepage	0.57	Depth to water	1.00
LuA:						
Lumbee	Very limited		Very limited		Very limited	
	Seepage	1.00	Depth to saturated zone	1.00	Cutbanks cave	1.00
			Seepage	0.57		
LyA:						
Lynchburg	Somewhat limited		Very limited		Somewhat limited	
	Seepage	0.81	Depth to saturated zone	1.00	Slow refill	0.19
					Cutbanks cave	0.10
			Seepage	0.04		
MaA, MaB:						
Marvyn	Very limited		Somewhat limited		Very limited	
	Seepage	1.00	Seepage	0.04	Depth to water	1.00
MeA:						
Meggett	Very limited		Very limited		Very limited	
	Seepage	1.00	Depth to saturated zone	1.00	Cutbanks cave	1.00
			Seepage	0.91		
			Piping	0.01		
MyA:						
Myatt	Very limited		Very limited		Very limited	
	Seepage	1.00	Depth to saturated zone	1.00	Cutbanks cave	1.00
			Seepage	0.10		
Paxville	Very limited		Very limited		Very limited	
	Seepage	1.00	Depth to saturated zone	1.00	Cutbanks cave	1.00
			Seepage	0.57		
NaB2:						
Nankin	Somewhat limited		Somewhat limited		Very limited	
	Seepage	0.05	Piping	0.86	Depth to water	1.00
NbC:						
Nankin	Somewhat limited		Somewhat limited		Very limited	
	Seepage	0.81	Piping	0.54	Depth to water	1.00
			Seepage	0.09		

Ponds and Embankments—Continued

Map symbol and soil name	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
Lucy----------------	Very limited		Somewhat limited		Very limited	
	Seepage	1.00	Seepage	0.57	Depth to water	1.00
NbD:						
Nankin--------------	Somewhat limited		Somewhat limited		Very limited	
	Seepage	0.81	Piping	0.43	Depth to water	1.00
	Slope	0.01	Seepage	0.09		
Lucy----------------	Very limited		Somewhat limited		Very limited	
	Seepage	1.00	Seepage	0.57	Depth to water	1.00
	Slope	0.01				
NeB:						
Noboco--------------	Somewhat limited		Somewhat limited		Somewhat limited	
	Seepage	0.81	Depth to saturated zone	0.32	Depth to saturated zone	0.32
			Seepage	0.06	Slow refill	0.19
					Cutbanks cave	0.10
NmB2:						
Noboco--------------	Somewhat limited		Somewhat limited		Somewhat limited	
	Seepage	0.81	Depth to saturated zone	0.32	Depth to saturated zone	0.32
			Seepage	0.06	Slow refill	0.19
					Cutbanks cave	0.10
NnA:						
Noboco--------------	Somewhat limited		Somewhat limited		Somewhat limited	
	Seepage	0.81	Depth to saturated zone	0.46	Depth to saturated zone	0.24
			Seepage	0.06	Slow refill	0.19
					Cutbanks cave	0.10
Goldsboro-----------	Somewhat limited		Very limited		Somewhat limited	
	Seepage	0.81	Depth to saturated zone	1.00	Slow refill	0.19
					Cutbanks cave	0.10
NoA:						
Norfolk-------------	Somewhat limited		Somewhat limited		Somewhat limited	
	Seepage	0.81	Seepage	0.11	Depth to saturated zone	0.99
					Slow refill	0.19
					Cutbanks cave	0.10
NoB:						
Norfolk-------------	Somewhat limited		Somewhat limited		Somewhat limited	
	Seepage	0.81	Seepage	0.12	Depth to saturated zone	0.99
					Slow refill	0.19
					Cutbanks cave	0.10
OkA:						
Okeetee-------------	Very limited		Very limited		Somewhat limited	
	Seepage	1.00	Depth to saturated zone	1.00	Cutbanks cave	0.10
			Seepage	0.04		

Ponds and Embankments—Continued

Map symbol and soil name	Pond reservoir areas: Rating class and limiting features	Value	Embankments, dikes, and levees: Rating class and limiting features	Value	Aquifer-fed excavated ponds: Rating class and limiting features	Value
OrA, OrB:						
Orangeburg----------	Somewhat limited		Somewhat limited		Very limited	
	Seepage	0.81	Seepage	0.10	Depth to water	1.00
OsB2:						
Orangeburg----------	Somewhat limited		Not limited		Very limited	
	Seepage	0.81			Depth to water	1.00
PaA:						
Paxville------------	Very limited		Very limited		Very limited	
	Seepage	1.00	Depth to saturated zone	1.00	Cutbanks cave	1.00
			Seepage	0.57		
PeA, PeB:						
Pelion--------------	Very limited		Somewhat limited		Very limited	
	Seepage	1.00	Depth to saturated zone	0.99	Depth to water	1.00
PtD:						
Pits----------------	Not limited		Not rated		Not rated	
Udorthents----------	Not limited		Not rated		Not rated	
RaA:						
Rains---------------	Somewhat limited		Very limited		Somewhat limited	
	Seepage	0.81	Depth to saturated zone	1.00	Cutbanks cave	0.10
SmA:						
Smithboro-----------	Not limited		Very limited		Somewhat limited	
			Depth to saturated zone	1.00	Slow refill	0.99
					Cutbanks cave	0.10
StA:						
State---------------	Very limited		Somewhat limited		Very limited	
	Seepage	1.00	Seepage	0.10	Cutbanks cave	1.00
			Depth to saturated zone	0.08	Depth to saturated zone	0.56
Eunola--------------	Very limited		Very limited		Somewhat limited	
	Seepage	1.00	Depth to saturated zone	1.00	Cutbanks cave	0.10
			Seepage	0.07		
ThA:						
Thursa--------------	Somewhat limited		Somewhat limited		Very limited	
	Seepage	0.81	Seepage	0.04	Depth to water	1.00
ThB:						
Thursa--------------	Somewhat limited		Not limited		Very limited	
	Seepage	0.81			Depth to water	1.00
TrB, TrC:						
Troup---------------	Very limited		Somewhat limited		Very limited	
	Seepage	1.00	Seepage	0.58	Depth to water	1.00

Ponds and Embankments—Continued

Map symbol and soil name	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
UdD:						
Udorthents, refuse substratum---------	Not limited		Not rated		Not rated	
Pits----------------	Not limited		Not rated		Not rated	
VaC:						
Vaucluse------------	Very limited		Very limited		Very limited	
	Seepage	1.00	Thin layer	1.00	Depth to water	1.00
			Seepage	0.04		
WaB:						
Wagram--------------	Very limited		Somewhat limited		Very limited	
	Seepage	1.00	Seepage	0.72	Depth to water	1.00

Engineering Properties

(Absence of an entry indicates that the data were not estimated.)

Map symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 inches	Fragments: 3-10 inches	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				Pct	Pct					Pct	
AaB:												
Ailey-----------	0-8	Sand	SW, SP	A-2-4	0	0-5	80-100	75-100	40-70	3-15	0-28	NP-10
	8-22	Sand	SW, SP	A-2-4	0	0-5	80-100	75-100	40-70	3-15	0-27	NP-10
	22-31	Sandy clay loam, sandy loam	SC-SM, SC	A-2-4	0	0-5	80-100	75-100	45-90	25-55	16-44	2-25
	31-42	Sandy clay loam	SC	A-6	0	0-5	80-100	75-100	60-90	25-55	23-44	13-25
	42-65	Sandy loam, coarse sandy loam, sandy clay loam	SC, SC-SM	A-2-4, A-4	0	0-5	80-100	75-100	45-90	25-55	20-40	9-21
	65-80	Coarse sandy loam, sandy loam, sandy clay loam, silty clay loam	SC, SC-SM, CL-ML	A-2-4, A-4	0	0-5	80-100	75-100	45-100	25-95	16-48	2-28
Barnwell--------	0-7	Loamy coarse sand, loamy sand, sand	SW, SP	A-2-4	0	0-5	80-100	75-100	40-75	3-30	0-27	NP-9
	7-10	Loamy coarse sand, loamy sand, sand	SW, SP	A-2-4	0	0-5	80-100	75-100	40-75	3-30	0-26	NP-9
	10-36	Sandy clay loam, sandy loam	SC-SM, SC	A-2-4	0	0-10	80-100	75-100	45-90	25-55	16-44	2-25
	36-50	Clay, clay loam, sandy clay loam	SC, CL	A-6	0	0-10	80-100	75-100	60-100	25-95	29-65	13-42
	50-56	Sandy clay loam, sandy loam, clay, loamy sand	SC, SC-SM, CL-ML	A-2-4, A-4	0	0-10	80-100	75-100	40-100	10-95	0-65	NP-42
	56-80	Sandy clay loam, sandy loam, silty clay loam, clay, loamy sand	CL-ML, SC-SM	A-4, A-2-4	0	0-10	80-100	75-100	40-100	10-95	0-65	NP-42
AcC:												
Ailey-----------	0-8	Sand	SW, SP	A-2-4	0	0-5	80-100	75-100	40-70	3-15	0-28	NP-10
	8-22	Sand	SP, SW	A-2-4	0	0-5	80-100	75-100	40-70	3-15	0-26	NP-10
	22-31	Sandy clay loam, sandy loam	SC, SC-SM	A-2-4	0	0-5	80-100	75-100	45-90	25-55	16-43	2-25
	31-42	Sandy clay loam	SC-SM, SC	A-6	0	0-5	80-100	75-100	60-90	25-55	23-43	13-25
	42-65	Sandy loam, coarse sandy loam, sandy clay loam	SC-SM, SC	A-2-4, A-4	0	0-5	80-100	75-100	45-90	25-55	16-48	2-28
	65-80	Coarse sandy loam, sandy loam, sandy clay loam, silty clay loam	SC-SM, SM, SC, CL-ML	A-4, A-2-4	0	0-5	80-100	75-100	45-100	25-95	16-48	2-28
Troup-----------	0-3	Sand	SM, SP-SM	A-2	0	0	100	100	50-70	5-15	0-24	NP-6
	3-46	Sand	SM, SP-SM	A-2	0	0	100	100	50-70	5-15	0-23	NP-6
	46-80	Sandy clay loam, sandy loam	CL, SC, SC-SM	A-2, A-4, A-6	0	0	100	100	60-90	30-55	24-43	9-25

Engineering Properties—Continued

Map symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 inches	Fragments: 3-10 inches	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				Pct	Pct					Pct	
Vaucluse--------	0-2	Loamy sand, sand	SM, SP-SM	A-2, A-3	0	0-11	80-100	75-100	40-75	3-30	10-25	NP
	2-6	Loamy sand, sand	SP-SM, SM	A-2, A-3	0	0-11	80-100	75-100	40-75	10-30	10-25	NP
	6-16	Sandy clay loam, sandy loam	SC, SC-SM	A-2, A-4, A-6	0	0-11	80-100	75-100	45-90	25-55	20-40	5-18
	16-25	Sandy clay loam, sandy loam	SC, SC-SM, SM	A-2, A-4, A-6	0	0-11	80-100	75-100	45-90	25-55	15-40	NP-20
	25-50	Sandy clay loam, sandy loam	SC, SC-SM, SM	A-2, A-4, A-6	0	0-11	80-100	75-100	45-90	25-55	15-30	NP-12
	50-80	Sandy loam, loamy sand, coarse sandy loam, sandy clay loam, silty clay loam	SC-SM, SM, CL, SC	A-2, A-4, A-6	0	0-11	80-100	75-100	40-100	10-95	15-30	NP-12
AeD:												
Ailey-----------	0-8	Sand	SW, SP	A-2-4	0	0-5	80-100	75-100	40-70	3-15	0-28	NP-10
	8-22	Sand	SW, SP	A-2-4	0	0-5	80-100	75-100	40-70	3-15	0-26	NP-10
	22-31	Sandy clay loam, sandy loam	SC, SC-SM	A-2-4	0	0-5	80-100	75-100	45-90	25-55	16-43	2-25
	31-42	Sandy clay loam	SC-SM, SC	A-6	0	0-5	80-100	75-100	60-90	25-55	23-43	13-25
	42-65	Sandy loam, coarse sandy loam, sandy clay loam	SC-SM, SC, SM	A-2-4, A-4	0	0-5	80-100	75-100	45-90	25-55	16-48	2-28
	65-80	Coarse sandy loam, sandy loam, sandy clay loam, silty clay loam	SC, CL-ML, SC-SM, SM	A-4, A-2-4	0	0-5	80-100	75-100	45-100	25-95	16-48	2-28
Vaucluse--------	0-2	Loamy sand, sand	SM, SP-SM	A-2, A-3	0	0-11	80-100	75-100	40-75	3-30	10-25	NP
	2-6	Loamy sand, sand	SP-SM, SM	A-2, A-3	0	0-11	80-100	75-100	40-75	10-30	10-25	NP
	6-16	Sandy clay loam, sandy loam	SC, SC-SM	A-2, A-4, A-6	0	0-11	80-100	75-100	45-90	25-55	20-40	5-18
	16-25	Sandy clay loam, sandy loam	SC, SC-SM, SM	A-2, A-4, A-6	0	0-11	80-100	75-100	45-90	25-55	15-40	NP-20
	25-50	Sandy clay loam, sandy loam	SC, SM, SC-SM	A-2, A-4, A-6	0	0-11	80-100	75-100	45-90	25-55	15-30	NP-12
	50-80	Sandy loam, loamy sand, coarse sandy loam, sandy clay loam, silty clay loam	CL, SC-SM, SC, SM	A-2, A-4, A-6	0	0-11	80-100	75-100	40-100	10-95	15-30	NP-12
Troup-----------	0-3	Sand	SM, SP-SM	A-2	0	0	100	100	50-70	5-15	0-24	NP-6
	3-46	Sand	SM, SP-SM	A-2	0	0	100	100	50-70	5-15	0-23	NP-6
	46-80	Sandy clay loam, sandy loam	CL, SC-SM, SC	A-2, A-4, A-6	0	0	100	100	60-90	30-55	24-43	9-25

Engineering Properties—Continued

Map symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 inches	Fragments: 3-10 inches	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				Pct	Pct					Pct	
AgB:												
Alaga-----------	0-7	Sand, loamy sand	SM, SP-SM	A-1-b, A-2, A-3	0	0	80-100	75-100	50-75	5-30	0-27	NP-6
	7-16	Sand	SM, SP-SM	A-1-b, A-2, A-3	0	0	80-100	75-100	50-70	5-15	0-22	NP-6
	16-36	Loamy sand, sand	SM, SP-SM	A-1-b, A-2, A-3	0	0	80-100	75-100	50-75	5-30	0-22	NP-6
	36-80	Sand, loamy sand	SP-SM, SM	A-1-b, A-2, A-3	0	0	80-100	75-100	50-75	5-30	0-22	NP-6
AoB:												
Alaga-----------	0-9	Sand	SM, SP-SM	A-1-b, A-2, A-3	0	0	80-100	75-100	50-70	5-15	0-23	NP-6
	9-63	Loamy sand, loamy fine sand	SM	A-2	0	0	80-100	75-100	50-85	15-45	0-24	NP-7
	63-80	Coarse sand, sand, fine sand	SP-SM, SM	A-1-b, A-2, A-3	0	0	80-100	75-100	50-80	5-35	0-22	NP-6
Lucknow---------	0-8	Coarse sand, sand	SM, SP-SM	A-2-4, A-3	0	0	80-100	75-100	40-70	3-15	0-20	NP-3
	8-48	Sand, coarse sand	SM, SP-SM	A-2-4, A-3	0	0	80-100	75-100	40-70	3-15	0-19	NP-3
	48-80	Sandy clay loam, sandy loam	SC, SC-SM	A-2-4, A-2-6, A-4, A-6	0	0	80-100	75-100	45-90	25-55	23-44	7-25
ApB:												
Alpin-----------	0-10	Sand	SM, SP-SM	A-2-4, A-3	0	0	100	100	50-70	5-15	0-25	NP-7
	10-44	Sand	SP-SM, SM	A-2-4, A-3	0	0	100	100	50-70	5-15	0-20	NP-4
	44-80	Sand, loamy sand	SP-SM, SM	A-2-4	0	0	100	100	50-75	5-30	16-21	2-4
ApD:												
Alpin-----------	0-10	Sand	SP-SM, SM	A-3, A-2-4	0	0	100	100	50-70	5-15	0-24	NP-7
	10-49	Sand	SP-SM, SM	A-2-4, A-3	0	0	100	100	50-70	5-15	0-19	NP-3
	49-80	Sand, loamy sand	SM, SP-SM	A-2-4	0	0	100	100	50-75	5-30	16-20	2-4
AuB:												
Autryville------	0-11	Sand	SM, SP-SM	A-2, A-3	0	0	80-100	75-100	40-70	3-15	0-22	NP-6
	11-21	Sand	SP-SM, SM	A-2, A-3	0	0	100	100	50-70	5-15	0-22	NP-6
	21-31	Sandy loam, fine sandy loam, sandy clay loam	SC-SM	A-2	0	0	100	100	60-85	30-55	17-29	4-15
	31-51	Loamy sand, sand	SM, SP-SM	A-2, A-3	0	0	100	100	50-75	5-30	0-20	NP-4
	51-80	Sandy clay loam, sandy loam, fine sandy loam	SC	A-2, A-4	0	0	100	100	60-85	25-55	17-35	4-15

Engineering Properties—Continued

Map symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 inches	Fragments: 3-10 inches	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plas- ticity index
	In				Pct	Pct					Pct	
BaB:												
Barnwell--------	0-7	Loamy coarse sand, sand, loamy sand	SP, SW	A-2-4	0	0-5	80-100	75-100	40-75	3-30	0-27	NP-9
	7-11	Loamy coarse sand, loamy sand, sand	SP, SW	A-2-4	0	0-5	80-100	75-100	40-75	3-30	0-26	NP-9
	11-36	Sandy clay loam, sandy loam	SC, SC-SM	A-2-4	0	0-10	80-100	75-100	45-90	25-55	16-44	2-25
	36-50	Clay, sandy clay loam, clay loam	SC, CL	A-6	0	0-10	80-100	75-100	60-100	25-95	29-65	13-42
	50-56	Sandy clay loam, sandy loam, loamy sand, clay	SC, SC-SM, CL-ML	A-2-4, A-4	0	0-10	80-100	75-100	40-100	10-95	0-65	NP-42
	56-80	Sandy clay loam, sandy loam, loamy sand, clay, silty clay loam	CL-ML, SC-SM	A-4, A-2-4	0	0-10	80-100	75-100	40-100	10-95	0-65	NP-42
BbB2:												
Barnwell--------	0-6	Sandy loam	SC-SM	A-2-4	0	0-5	80-100	75-100	45-70	25-40	16-32	2-13
	6-36	Sandy clay loam, sandy loam	SC-SM, SC	A-2-4	0	0-10	80-100	75-100	45-90	25-55	16-44	2-25
	36-50	Clay, sandy clay loam, clay loam	SC-SM, CL, SC	A-6	0	0-10	80-100	75-100	60-100	25-95	29-65	13-42
	50-56	Sandy clay loam, sandy loam, loamy sand, clay	SM, SC-SM, CL-ML, SC	A-2-4, A-4	0	0-10	80-100	75-100	40-100	10-95	0-65	NP-42
	56-80	Sandy clay loam, sandy loam, loamy sand, clay, silty clay loam	SC-SM, CL-ML, SM, SC	A-4, A-2-4	0	0-10	80-100	75-100	40-100	10-95	0-65	NP-42
BcC:												
Barnwell--------	0-7	Loamy coarse sand, loamy sand, sand	SW, SP	A-2-4	0	0-5	80-100	75-100	40-75	3-30	0-28	NP-10
	7-10	Loamy coarse sand, loamy sand, sand	SW, SP	A-2-4	0	0-5	80-100	75-100	40-75	3-30	0-27	NP-10
	10-36	Sandy clay loam, sandy loam	SC-SM, SC	A-2-4	0	0-10	80-100	75-100	45-90	25-55	16-44	2-25
	36-50	Clay, sandy clay loam, clay loam	SC, CL	A-6	0	0-10	80-100	75-100	60-100	25-95	29-65	13-42
	50-56	Sandy clay loam, sandy loam, loamy sand, clay	SC, CL-ML, SC-SM	A-2-4, A-4	0	0-10	80-100	75-100	40-100	10-95	0-65	NP-42
	56-80	Sandy clay loam, sandy loam, loamy sand, clay, silty clay loam	SC-SM, CL-ML	A-4, A-2-4	0	0-10	80-100	75-100	40-100	10-95	0-65	NP-42

Engineering Properties—Continued

Map symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 inches	Fragments: 3-10 inches	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				Pct	Pct					Pct	
Cowarts---------	0-6	Loamy sand, sand	SW, SP-SM, SM	A-2-4	0	0-5	80-100	75-100	40-75	3-30	0-26	NP-5
	6-29	Sandy clay loam, sandy loam	SC-SM, SC	A-2-4	0	0-5	80-100	75-100	45-90	25-55	9-31	1-13
	29-80	Sandy loam, loamy sand, coarse sandy loam, sandy clay loam, silty clay loam	SC-SM, SM, SC, CL-ML	A-2-4, A-4	0	0-5	80-100	75-100	45-100	10-95	9-34	1-14
Troup-----------	0-3	Sand	SM, SP-SM	A-2	0	0	100	100	50-70	5-15	0-24	NP-6
	3-46	Sand	SM, SP-SM	A-2	0	0	100	100	50-70	5-15	0-23	NP-6
	46-80	Sandy clay loam, sandy loam	SC, SC-SM, CL	A-2, A-4, A-6	0	0	100	100	60-90	30-55	24-43	9-25
BoB:												
Bonneau---------	0-8	Sand, fine sand	SM	A-2, A-3	0	0	100	100	50-80	5-35	0-14	NP
	8-24	Sand, fine sand	SM	A-2, A-3	0	0	100	100	50-80	5-35	0-14	NP
	24-51	Sandy clay loam, sandy loam	SC, SC-SM	A-2, A-4, A-6	0	0	100	100	60-85	25-55	21-40	4-21
	51-80	Sandy clay loam, sandy clay	CL, CL-ML, SC, SC-SM	A-2, A-4, A-6	0	0	100	100	80-95	35-60	20-40	4-18
BuA:												
Butters---------	0-9	Coarse sand, sand	SM	A-2	0	0	80-100	75-100	40-70	3-15	16-26	2-6
	9-12	Loamy sand, sand	SM, SP-SM	A-2	0	0	80-100	75-100	40-70	3-30	15-25	1-7
	12-30	Sandy loam, coarse sandy loam, sandy clay loam	SC-SM	A-2, A-4	0	0	80-100	75-100	45-90	25-55	20-32	6-13
	30-49	Loamy sand, sand	SM, SP, SP-SM	A-2, A-3	0	0	80-100	75-100	40-70	3-30	0-23	NP-6
	49-80	Sandy clay loam, sandy loam	SC, SC-SM	A-2, A-4, A-6	0	0	80-100	75-100	45-90	25-55	20-36	6-17
CaB:												
Candor----------	0-8	Sand, coarse sand	SM, SP-SM	A-2, A-2-4, A-3	0	0	80-100	75-100	40-70	3-15	0-18	NP-1
	8-25	Coarse sand, sand	SM, SP-SM	A-3, A-2, A-2-4	0	0	80-100	75-100	40-70	3-15	0-18	NP-1
	25-36	Loamy sand, loamy coarse sand	SP-SM, SM	A-2-4, A-2	0	0	80-100	75-100	40-75	10-30	17-25	3-7
	36-61	Coarse sand, sand	SM, SP-SM	A-2, A-3	0	0	80-100	75-100	40-70	3-15	0-18	NP-1
	61-80	Sandy clay loam, sandy loam, coarse sandy loam, fine sandy loam	SC, SC-SM	A-2, A-4, A-6, A-7	0	0	80-100	75-100	45-90	25-55	20-44	6-25

Engineering Properties—Continued

Map symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 inches	Fragments: 3-10 inches	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				Pct	Pct					Pct	
CcA:												
Chastain--------	0-4	Loam	ML, CL	A-4, A-6, A-7	0	0	100	100	65-95	45-75	28-57	10-24
	4-56	Clay, clay loam	CH, CL	A-6, A-7	0	0	100	100	65-100	55-95	39-72	19-43
	56-80	Sand	SM, SP-SM	A-2, A-3	0	0	80-100	75-100	40-70	3-15	0-29	NP-6
Chewacla--------	0-1	Loam	CL, CL-ML	A-4, A-6, A-7	0	0	80-100	75-100	65-95	45-75	22-52	6-24
	1-38	Loam, sandy clay loam, sandy loam, fine sandy loam, silty clay loam, silt loam	SC, CL, SC-SM, CL-ML	A-4, A-6, A-7	0	0	80-100	75-100	45-100	25-95	24-52	7-24
	38-62	Sandy clay loam, clay loam, loam, sandy loam, fine sandy loam, silty clay loam, silt loam	CL-ML, CL, SC-SM, SC	A-4, A-6, A-7	0	0	80-100	75-100	45-100	25-95	24-52	7-24
	62-80	Sandy loam, stratified sand to loamy sand to sandy loam to sandy clay loam	SC, SC-SM	A-2-4, A-4	0	0	80-100	75-100	40-75	3-55	18-39	4-21
ChA:												
Chewacla--------	0-1	Loam	CL, CL-ML	A-4, A-6, A-7	0	0	80-100	75-100	65-95	45-75	22-52	6-24
	1-38	Loam, sandy clay loam, sandy loam, fine sandy loam, silty clay loam, silt loam	SC, CL, SC-SM, CL-ML	A-4, A-6, A-7	0	0	80-100	75-100	45-100	25-95	24-52	7-24
	38-62	Sandy clay loam, clay loam, loam, sandy loam, fine sandy loam, silty clay loam, silt loam	CL-ML, CL, SC-SM, SC	A-4, A-6, A-7	0	0	80-100	75-100	45-100	25-95	24-52	7-24
	62-80	Stratified sand to loamy sand to sandy loam to sandy clay loam, sandy loam	SC, SC-SM	A-2-4, A-4	0	0	80-100	75-100	40-75	3-55	18-39	4-21
Chastain--------	0-4	Loam	CL, ML	A-4, A-6, A-7	0	0	100	100	65-95	45-75	28-57	10-24
	4-56	Clay, clay loam	CH, CL	A-6, A-7	0	0	100	100	65-100	55-95	39-72	19-43
	56-80	Sand	SM, SP-SM	A-2, A-3	0	0	80-100	75-100	40-70	3-15	0-29	NP-6

Engineering Properties—Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In				Pct	Pct					Pct	
CwD:												
Cowarts----------	0-6	Loamy sand, sand	SM, SP-SM, SW	A-2-4	0	0-5	80-100	75-100	40-75	3-30	0-26	NP-5
	6-29	Sandy clay loam, sandy loam	SC-SM, SC	A-2-4	0	0-5	80-100	75-100	45-90	25-55	9-31	1-13
	29-80	Sandy loam, loamy sand, coarse sandy loam, sandy clay loam, silty clay loam	CL-ML, SC, SM, SC-SM	A-2-4, A-4	0	0-5	80-100	75-100	45-100	10-95	9-34	1-14
CxA:												
Coxville---------	0-7	Sandy loam	SC-SM, SM	A-4, A-6, A-7	0	0	100	100	45-70	25-40	17-45	2-18
	7-80	Sandy clay, clay, clay loam	CH, CL, SC	A-7	0	0	100	100	85-100	45-80	43-70	25-43
DaA:												
Dorovan----------	0-10	Silty clay loam	CL	A-7	0	0	100	100	95-100	85-95	35-50	18-28
	10-70	Muck	PT	A-8	0	0	100	100	60-70	30-40	0-75	NP-13
	70-80	Coarse sand, sand	SP-SM	A-2-4	0	0	100	100	50-70	5-15	0-31	NP-13
DoA:												
Dothan-----------	0-8	Loamy sand, sand, loamy coarse sand	SP-SM, SP, SM	A-1, A-2-4	0	0-11	80-100	75-100	40-75	3-30	6-28	NP-5
	8-37	Sandy clay loam, sandy loam, clay loam	CL, SC	A-2-4, A-4, A-6	0	0-11	80-100	75-100	45-100	25-80	9-34	1-14
	37-80	Sandy clay loam, clay loam, clay	CL, SC	A-2-4, A-4, A-6	0	0-5	80-100	75-100	60-100	25-95	20-34	6-14
DoB:												
Dothan-----------	0-8	Loamy sand, sand, loamy coarse sand	SP-SM, SP, SM	A-2-4, A-1	0	0-11	80-100	75-100	40-75	3-30	6-16	NP-5
	8-37	Sandy clay loam, sandy loam, clay loam	SC, CL	A-2-4, A-4, A-6	0	0-11	80-100	75-100	45-100	25-80	9-34	1-14
	37-80	Sandy clay loam, clay loam	CL, SC	A-6, A-2-4, A-4	0	0-5	80-100	75-100	60-100	25-80	20-34	6-14
DtB2:												
Dothan-----------	0-4	Sandy loam	SC-SM, SM	A-2	0	0-11	80-100	75-100	45-70	25-40	16-27	2-10
	4-37	Sandy clay loam, sandy loam, clay loam	CL, SC	A-2, A-6, A-2-4	0	0-11	80-100	75-100	45-90	25-55	9-34	1-14
	37-80	Sandy clay loam, sandy clay	CL, SC	A-6, A-2, A-2-4	0	0-5	80-100	75-100	60-90	25-55	20-34	6-14

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In				Pct	Pct					Pct	
EuA:												
Eunola----------	0-7	Sandy loam, loamy sand	SM, SC-SM	A-4, A-2	0	0	80-100	75-100	40-75	10-40	0-32	NP-13
	7-10	Sandy loam, loamy sand	SM, SC-SM	A-2, A-4	0	0	80-100	75-100	40-75	10-40	0-32	NP-13
	10-38	Sandy clay loam, clay loam	SC, CL	A-2, A-6	0	0	80-100	75-100	60-100	25-80	27-44	12-25
	38-55	Sandy clay loam, clay loam	CL, SC	A-2, A-4, A-6	0	0	80-100	75-100	60-100	25-80	18-44	4-25
	55-80	Sandy loam, loamy sand, sand	SC-SM, SM	A-2, A-4, A-6	0	0	80-100	75-100	40-75	3-40	0-30	NP-12
FaA:												
Faceville-------	0-7	Loamy sand, sand	SC-SM, SM	A-2	0	0-4	80-100	75-100	40-75	3-30	0-24	NP-6
	7-13	Loamy sand, sand	SC-SM, SM	A-2	0	0-4	80-100	75-100	40-75	3-30	0-23	NP-6
	13-80	Clay, sandy clay, clay loam	SC, CL, CH	A-7	0	0-4	80-100	75-100	65-100	45-95	42-61	3-39
FaB:												
Faceville-------	0-7	Loamy sand, sand	SM, SC-SM	A-2	0	0-4	80-100	75-100	40-75	3-30	0-24	NP-6
	7-13	Loamy sand, sand	SC-SM, SM	A-2	0	0-4	80-100	75-100	40-75	3-30	0-23	NP-6
	13-80	Clay, sandy clay, clay loam	SC, CL, CH	A-7	0	0-4	98-100	95-100	75-99	45-72	42-61	3-39
FbB2:												
Faceville-------	0-2	Sandy loam	SM, SC-SM	A-4	0	0-4	80-100	75-100	45-70	25-40	0-32	NP-13
	2-80	Clay, sandy clay, clay loam	CL, CH, SC	A-7	0	0-4	80-100	75-100	65-100	45-95	42-61	3-39
FoB:												
Foxworth--------	0-4	Sand, coarse sand	SP-SM, SM	A-2-4, A-3	0	0	100	100	50-70	5-15	0-22	NP-4
	4-80	Sand, coarse sand	SP-SM, SM	A-2-4, A-3	0	0	100	100	50-70	5-15	0-21	NP-4
FuB:												
Fuquay----------	0-8	Sand, loamy sand, coarse sand	SM, SP-SM	A-1, A-2, A-3	0	0-3	80-100	75-100	40-75	3-30	0-21	NP-4
	8-27	Sand, loamy sand, coarse sand	SP-SM, SM	A-1, A-2, A-3	0	0-3	80-100	75-100	40-75	3-30	0-20	NP-4
	27-42	Sandy clay loam	SC-SM, SC	A-2, A-4, A-6	0	0-5	80-100	75-100	60-90	25-55	20-44	6-25
	42-80	Sandy clay loam, clay loam	CL, SC	A-2, A-6, A-7-6	0	0	80-100	75-100	60-100	25-80	29-44	13-25

Engineering Properties—Continued

Map symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 inches	Fragments: 3-10 inches	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				Pct	Pct					Pct	
GoA:												
Goldsboro-------	0-8	Sandy loam	SC-SM, SM	A-2, A-4	0	0	80-100	75-100	45-70	25-40	17-31	2-10
	8-35	Sandy clay loam, sandy loam	SC-SM, SC, CL	A-2, A-6	0	0	80-100	75-100	45-90	25-55	20-39	12-21
	35-80	Sandy clay loam, clay loam	SC, CL	A-6, A-7-6	0	0	80-100	75-100	60-100	25-80	20-43	13-24
JhA:												
Johns-----------	0-7	Loamy sand, sand	SM, SP-SM	A-2	0	0	80-100	75-100	40-75	3-30	0-28	NP-10
	7-15	Loamy sand, sand	SP-SM, SM	A-2	0	0	80-100	75-100	40-75	3-30	0-27	NP-10
	15-36	Sandy clay loam, sandy loam	CL, SC	A-2, A-6, A-7	0	0	80-100	75-100	45-90	25-55	20-44	12-25
	36-80	Sand, coarse sand, loamy sand	SM, SP-SM	A-2-4	0	0	80-100	75-100	40-75	3-30	6-27	NP-5
JoA:												
Johnston--------	0-5	Muck, sandy loam, loam, loamy coarse sand	PT	A-8	0	0	100	100	60-95	15-75	0-75	NP-13
	5-31	Fine sandy loam, sandy loam, coarse sandy loam, loamy coarse sand, loam	SM, CL-ML, SC-SM	A-2, A-4, A-2-4	0	0	100	100	50-95	15-75	15-35	NP-10
	31-80	Sand, fine sand	SP-SM, SM	A-2, A-3, A-2-4	0	0	100	100	50-80	5-35	0-14	NP
JzA:												
Johnston--------	0-5	Sandy loam, loam, loamy coarse sand	PT	A-8	0	0	100	100	60-95	15-75	0-75	NP-13
	5-31	Fine sandy loam, sandy loam, coarse sandy loam, loamy coarse sand, loam	CL-ML, SM, SC-SM	A-2, A-4, A-2-4	0	0	100	100	50-95	15-75	15-35	NP-10
	31-80	Fine sand, sand	SM, SP-SM	A-2, A-3, A-2-4	0	0	100	100	50-80	5-35	0-14	NP
Mouzon----------	0-8	Fine sandy loam, sandy loam, loamy fine sand, loam	SM, CL-ML, SC-SM	A-2	0	0	100	100	60-95	25-75	15-30	NP-7
	8-31	Sandy clay loam, clay loam	CL, SC	A-2-6, A-6	0	0	100	100	80-100	35-95	30-40	16-23
	31-46	Fine sandy loam, sandy loam, loamy sand, sandy clay loam	SC-SM, SC, SM	A-4, A-6	0	0	100	100	50-90	15-55	20-40	3-22
	46-80	Loamy fine sand, loamy sand, sand, coarse sand	SM, SP-SM	A-1-b, A-2	0	0	80-100	75-100	40-70	3-15	15-30	NP-7

Engineering Properties—Continued

Map symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 inches	Fragments: 3-10 inches	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				Pct	Pct					Pct	
KaA:												
Kalmia----------	0-6	Loamy sand, sand	SM, SC-SM	A-2	0	0	80-100	75-100	40-75	3-30	10-20	NP
	6-23	Sandy clay loam, sandy loam	SC, SC-SM, SM	A-2, A-4, A-6	0	0	80-100	75-100	45-90	25-55	20-40	4-15
	23-27	Sandy loam, sandy clay loam	SC-SM, SC, SM	A-2, A-4, A-6	0	0	80-100	75-100	45-90	25-55	20-40	4-15
	27-80	Loamy sand, sand, loamy fine sand, coarse sand	SP-SM, SP, SM	A-2, A-3	0	0	80-100	75-100	40-85	3-45	10-20	NP
LaB:												
Lakeland--------	0-5	Sand	SM, SP-SM	A-2-4, A-3	0	0	100	100	50-70	3-15	0-14	NP
	5-30	Sand	SM, SP-SM	A-2-4, A-3	0	0	100	100	50-70	3-15	0-14	NP
	30-80	Sand	SP, SP-SM	A-2-4, A-3	0	0	100	100	50-70	3-15	0-14	NP
LaD:												
Lakeland--------	0-5	Sand	SP-SM, SM	A-2-4, A-3	0	0	100	100	50-70	3-15	0-22	NP-4
	5-80	Sand	SM, SP-SM	A-3, A-2-4	0	0	100	100	50-70	3-15	0-20	NP-3
LbB:												
Lucknow---------	0-8	Coarse sand, sand	SM, SP-SM	A-2-4, A-3	0	0	80-100	75-100	40-70	3-15	0-20	NP-3
	8-48	Sand, coarse sand	SM, SP-SM	A-2-4, A-3	0	0	80-100	75-100	40-70	3-15	0-19	NP-3
	48-80	Sandy clay loam, sandy loam	SC, SC-SM	A-2-4, A-2-6, A-4, A-6	0	0	80-100	75-100	45-90	25-55	23-44	7-25
LcB:												
Lucy------------	0-7	Sand	SM, SP-SM	A-2	0	0	80-100	75-100	40-70	3-15	0-24	NP-6
	7-22	Sand	SM, SP-SM	A-2	0	0	80-100	75-100	40-70	3-15	0-24	NP-6
	22-80	Sandy clay loam, sandy loam	CL, SC-SM, SC	A-2, A-4, A-6	0	0	80-100	75-100	45-90	25-55	20-39	6-21
LuA:												
Lumbee----------	0-8	Loam, sandy loam	SM, SC-SM	A-2, A-4	0	0	80-100	75-100	45-95	25-75	15-20	NP-7
	8-28	Clay loam, sandy clay loam	SC, CL	A-4, A-6, A-7	0	0	80-100	75-100	60-100	25-80	19-45	7-25
	28-80	Coarse sand, sand	SP-SM, SM	A-2-4	0	0	80-100	75-100	40-70	3-15	6-14	NP-2
LyA:												
Lynchburg-------	0-7	Sandy loam	SC-SM, SM	A-2, A-4	0	0	80-100	75-100	45-70	25-40	17-41	2-13
	7-14	Sandy loam, sandy clay loam	SC, SC-SM, CL	A-2, A-6	0	0	80-100	75-100	45-90	25-55	27-44	12-25
	14-80	Clay loam, sandy clay loam	CL, SC	A-2, A-6	0	0	80-100	75-100	60-100	25-80	27-44	12-25

Engineering Properties—Continued

Map symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 inches	Fragments: 3-10 inches	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				Pct	Pct					Pct	
MaA:												
Marvyn----------	0-6	Sand, loamy sand	SM, SP-SM	A-2, A-3	0	0	80-100	75-100	40-75	3-30	0-24	NP-6
	6-47	Sandy clay loam, sandy loam, clay loam	SC, SC-SM, CL	A-2, A-6	0	0	80-100	75-100	45-100	25-80	27-53	12-32
	47-80	Sandy loam, stratified sand to loamy sand to loamy fine sand to sandy loam to sandy clay loam	SC, SC-SM, SP-SM, SM	A-2, A-4, A-6	0	0	80-100	75-100	40-90	3-55	16-40	2-21
MaB:												
Marvyn----------	0-2	Sand, loamy sand	SP-SM, SM	A-2, A-3	0	0	80-100	75-100	40-75	3-30	0-24	NP-6
	2-47	Sandy clay loam, sandy loam, clay loam	CL, SC-SM, SC	A-2, A-6	0	0	80-100	75-100	45-100	25-80	27-53	12-32
	47-80	Stratified sand to loamy sand to loamy fine sand to sandy loam to sandy clay loam, sandy loam	SC-SM, SM, SP-SM, SC	A-2, A-4, A-6	0	0	80-100	75-100	45-90	3-55	16-40	2-21
MeA:												
Meggett---------	0-5	Sandy loam, loam, loamy fine sand	SC-SM, SM	A-4, A-2	0	0	80-100	75-100	45-95	20-75	0-33	NP-13
	5-51	Clay loam, clay	CH, CL, SC	A-6, A-7	0	0	80-100	75-100	60-100	25-95	32-69	14-44
	51-80	Coarse sand, sand, loamy coarse sand, sandy loam, fine sandy loam	SP-SM, SM	A-2-4, A-3	0	0	80-100	75-100	40-85	3-55	0-32	NP-13
MyA:												
Myatt-----------	0-7	Sandy loam, fine sandy loam, loamy sand	SC-SM, SM	A-2-4, A-4	0	0	80-100	75-100	40-85	10-55	16-33	2-13
	7-13	Loam, sandy loam	CL-ML, SM, SC-SM	A-2-4, A-4	0	0	80-100	75-100	45-95	25-75	16-32	2-13
	13-50	Clay loam, sandy clay loam	SC, CL	A-6, A-7	0	0	80-100	75-100	60-90	25-80	27-49	12-28
	50-80	Loamy sand, sand, sandy loam	SM, SC-SM	A-2, A-4, A-6	0	0	80-100	75-100	40-75	3-40	0-32	NP-13
Paxville--------	0-13	Coarse sandy loam, sandy loam	SC-SM, SM	A-2-4, A-4	0	0	80-100	75-100	45-99	23-50	0-35	NP-13
	13-48	Sandy clay loam, clay loam	CL, SC	A-6	0	0	80-100	75-100	60-100	25-80	20-45	13-25
	48-80	Loamy coarse sand, coarse sand, sand, loamy sand	SM, SP-SM	A-3	0	0	80-100	75-100	40-75	3-30	0-27	NP-10

Engineering Properties—Continued

Map symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments >10 inches	Fragments 3-10 inches	Percentage passing sieve number-- 4	10	40	200	Liquid limit	Plasticity index
	In				Pct	Pct					Pct	
NaB2:												
Nankin----------	0-6	Sandy clay loam, sandy loam	SC-SM, SC, SM	A-2, A-4	0	0-11	80-100	75-100	45-90	25-55	18-36	3-17
	6-51	Clay, sandy clay, clay loam	CL	A-4, A-6, A-7	0	0-11	80-100	75-100	65-100	55-95	20-45	3-20
	51-80	Sandy clay, sandy clay loam	SC, CL	A-4, A-6, A-7	0	0-11	80-100	75-100	60-100	25-95	20-45	7-20
NbC:												
Nankin----------	0-12	Loamy sand, sand	SP-SM, SM	A-2	0	0-11	80-100	75-100	40-75	3-30	0-28	NP-10
	12-49	Sandy clay, clay, clay loam	CL	A-6, A-7	0	0-11	80-100	75-100	65-100	55-95	40-60	15-30
	49-80	Sandy clay loam, sandy clay	SC, CL	A-4, A-6, A-7	0	0-11	80-100	75-100	60-100	25-95	7-55	NP-39
Lucy------------	0-7	Sand	SM, SP-SM	A-2	0	0	80-100	75-100	40-70	3-15	0-24	NP-6
	7-22	Sand	SP-SM, SM	A-2	0	0	80-100	75-100	40-70	3-15	0-24	NP-6
	22-80	Sandy clay loam, sandy loam	SC-SM, CL, SC	A-2, A-4, A-6	0	0	80-100	75-100	45-90	25-55	20-39	6-21
NbD:												
Nankin----------	0-12	Loamy sand, sand	SP-SM, SM	A-2	0	0-11	80-100	75-100	40-75	3-30	0-28	NP-10
	12-49	Sandy clay, clay, clay loam	CL	A-6, A-7	0	0-11	80-100	75-100	65-100	55-95	25-50	15-30
	49-80	Sandy clay loam, sandy clay	SC, CL	A-4, A-6, A-7	0	0-11	80-100	75-100	60-100	25-95	25-61	3-39
Lucy------------	0-7	Sand	SM, SP-SM	A-2	0	0	80-100	75-100	40-70	3-15	0-24	NP-6
	7-22	Sand	SM, SP-SM	A-2	0	0	80-100	75-100	40-70	3-15	0-24	NP-6
	22-80	Sandy clay loam, sandy loam	SC, SC-SM, CL	A-2, A-4, A-6	0	0	80-100	75-100	45-90	25-55	20-39	6-21
NeB:												
Noboco----------	0-13	Loamy sand	SM	A-2-4	0	0	80-100	75-100	40-75	10-30	0-21	NP-4
	13-34	Sandy clay loam	CL, SC	A-2, A-4, A-6	0	0	80-100	75-100	60-90	25-55	20-38	4-15
	34-80	Sandy clay loam, sandy clay	CL, SC	A-2, A-4, A-6	0	0	80-100	75-100	60-90	25-90	20-38	4-15
NmB2:												
Noboco----------	0-4	Sandy loam	SM, SC-SM	A-2, A-4	0	0	80-100	75-100	45-70	25-40	0-14	NP
	4-34	Sandy clay loam	CL, SC	A-2, A-4, A-6	0	0	80-100	75-100	60-90	25-55	20-38	4-15
	34-80	Sandy clay loam, sandy clay	CL, SC	A-2, A-4, A-6	0	0	80-100	75-100	70-90	25-90	20-38	4-15

Engineering Properties—Continued

Map symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 inches	Fragments: 3-10 inches	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plas-ticity index
	In				Pct	Pct					Pct	
NnA:												
Noboco----------	0-13	Loamy sand	SM	A-2-4	0	0	80-100	75-100	40-75	10-30	0-22	NP-4
	13-34	Sandy clay loam	CL, SC	A-2, A-4, A-6	0	0	80-100	75-100	60-90	25-55	20-38	4-15
	34-80	Sandy clay loam, sandy clay	CL, SC	A-2, A-4, A-6	0	0	80-100	75-100	60-90	25-90	20-38	4-15
Goldsboro-------	0-8	Sandy loam	SC-SM, SM	A-2, A-4	0	0	80-100	75-100	45-70	25-40	17-31	2-10
	8-35	Sandy clay loam, sandy loam	CL, SC, SC-SM	A-2, A-6	0	0	80-100	75-100	45-90	25-55	20-39	12-21
	35-80	Sandy clay loam, clay loam	CL, SC	A-6, A-7-6	0	0	80-100	75-100	60-100	25-80	20-43	13-24
NoA:												
Norfolk---------	0-7	Loamy sand	SM	A-2, A-2-4	0	0	80-100	75-100	40-75	10-30	0-31	NP-10
	7-15	Loamy sand	SM	A-2, A-2-4	0	0	80-100	75-100	40-75	10-30	0-31	NP-10
	15-80	Sandy clay loam, sandy loam, clay loam	SC-SM, SC, CL	A-2, A-4, A-6	0	0	80-100	75-100	45-100	25-80	20-38	4-15
NoB:												
Norfolk---------	0-7	Loamy sand	SM	A-2-4	0	0	80-100	75-100	40-75	10-30	16-33	2-12
	7-15	Loamy sand	SM	A-2-4	0	0	80-100	75-100	40-75	10-30	16-31	2-12
	15-80	Sandy clay loam, sandy loam, clay loam	SC-SM, SC, CL	A-2, A-6	0	0	80-100	75-100	45-100	25-80	27-45	12-25
OkA:												
Okeetee---------	0-8	Fine sandy loam, sandy loam	SM	A-2, A-4	0	0	80-100	75-100	45-85	25-55	0-32	NP-13
	8-17	Clay	CH, CL	A-7	0	0	80-100	75-100	65-100	55-95	43-67	25-44
	17-63	Clay, clay loam	CH, CL	A-6, A-7	0	0	80-100	75-100	65-100	55-95	35-67	17-44
	63-80	Fine sandy loam, sandy loam, coarse sand	SC-SM, SM	A-4, A-6	0	0	80-100	75-100	45-100	25-55	0-33	NP-14
OrA:												
Orangeburg------	0-10	Loamy sand	SM	A-2-4	0	0	80-100	75-100	40-75	10-30	4-21	NP-10
	10-19	Sandy clay loam, sandy loam	SC-SM, SC, CL	A-6, A-7	0	0	80-100	75-100	45-100	25-80	29-54	13-32
	19-80	Clay loam, sandy clay loam, clay	CL, SC	A-6, A-7	0	0	80-100	75-100	60-100	25-95	29-62	13-39
OrB:												
Orangeburg------	0-10	Loamy sand	SM	A-2-4	0	0	80-100	75-100	40-75	10-30	16-24	1-6
	10-19	Sandy clay loam, sandy loam	SC, CL	A-4, A-6, A-7	0	0	80-100	75-100	45-100	25-80	24-53	9-32
	19-80	Clay loam, sandy clay loam, clay	CL, SC	A-6, A-7	0	0	80-100	75-100	60-100	25-95	29-61	13-39

Engineering Properties—Continued

Map symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments >10 inches	Fragments 3-10 inches	Percentage passing sieve number-- 4	10	40	200	Liquid limit	Plas- ticity index
	In				Pct	Pct					Pct	
OsB2:												
Orangeburg------	0-5	Sandy loam	SC-SM, SM	A-2	0	0	80-100	75-100	45-70	25-40	16-33	1-13
	5-19	Sandy clay loam	SC, CL	A-6, A-7	0	0	80-100	75-100	60-100	25-80	29-53	13-32
	19-80	Clay loam, sandy clay loam, clay	CL, SC	A-6, A-7	0	0	80-100	75-100	60-100	25-95	29-53	13-32
PaA:												
Paxville--------	0-13	Coarse sandy loam, sandy loam	SM, SC-SM	A-2-4, A-4	0	0	80-100	75-100	45-99	23-50	0-35	NP-13
	13-48	Sandy clay loam, clay loam	SC, CL	A-6	0	0	80-100	75-100	60-100	25-80	20-45	13-25
	48-80	Loamy coarse sand, coarse sand, sand, loamy sand	SM, SP-SM	A-3	0	0	80-100	75-100	40-75	3-30	0-27	NP-10
PeA:												
Pelion----------	0-8	Loamy sand, sand, fine sandy loam, loamy fine sand	SM, SP-SM	A-2, A-3	0	0-11	80-100	75-100	40-85	3-55	0-24	NP-6
	8-24	Sandy clay loam, clay loam	SC, CL	A-2, A-6	0	0-11	80-100	75-100	60-100	25-80	27-44	12-25
	24-47	Clay loam, sandy clay loam, sandy clay, clay	SC, CL	A-2, A-6, A-7	0	0	80-100	75-100	60-100	25-95	27-57	12-36
	47-52	Clay loam, sandy clay loam, sandy clay, clay	SC, CL	A-2, A-6, A-7	0	0-11	80-100	75-100	60-100	25-95	27-57	12-36
	52-80	Sandy loam, loamy fine sand, loamy coarse sand, silty clay loam	SC-SM, CL, SM	A-2, A-4, A-6	0	0-11	80-100	75-100	45-100	20-95	0-32	NP-13
PeB:												
Pelion----------	0-8	Loamy sand, sand, fine sandy loam, loamy fine sand	SP-SM, SM	A-2, A-3	0	0-11	80-100	75-100	40-85	3-55	0-24	NP-6
	8-24	Sandy clay loam, clay loam	SC, CL	A-2, A-6	0	0-11	80-100	75-100	60-100	25-80	27-44	12-25
	24-47	Clay loam, sandy clay loam, sandy clay, clay	SC, CL	A-2, A-6, A-7	0	0	80-100	75-100	60-100	25-95	27-57	12-36
	47-52	Clay loam, sandy clay loam, sandy clay, clay	SC, CL	A-2, A-6, A-7	0	0-11	80-100	75-100	60-100	25-95	27-57	12-36
	52-80	Sandy loam, loamy fine sand, loamy coarse sand, silty clay loam	SC-SM, CL, SM	A-2, A-4, A-6	0	0-11	80-100	75-100	45-100	20-95	0-32	NP-13

Engineering Properties—Continued

Map symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 inches	Fragments: 3-10 inches	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				Pct	Pct					Pct	
PtD:												
Pits------------	---	---	---	---	---	---	---	---	---	---	---	---
Udorthents------	---	---	---	---	---	---	---	---	---	---	---	---
RaA:												
Rains-----------	0-7	Sandy loam	SC-SM, SM	A-2, A-4	0	0	80-100	75-100	45-70	25-40	18-43	2-13
	7-12	Sandy loam, fine sandy loam	SC-SM, SM	A-2, A-4, A-6	0	0	80-100	75-100	45-85	25-55	17-33	2-13
	12-20	Sandy clay loam, sandy loam, clay loam	CL, SC-SM, SC	A-6, A-7	0	0	80-100	75-100	45-100	25-80	28-50	12-28
	20-80	Sandy clay loam, sandy clay, clay loam	SC-SM, CL, SC	A-6, A-7	0	0	80-100	75-100	60-100	25-80	28-50	12-28
SmA:												
Smithboro-------	0-3	Sandy loam, fine sandy loam	SM, SC-SM	A-4	0	0	100	100	60-85	30-55	21-37	6-13
	3-5	Sandy loam, fine sandy loam	SC-SM, SM	A-4	0	0	100	100	60-85	30-55	21-37	6-13
	5-12	Clay loam, clay	CH, CL	A-6, A-7	0	0	100	100	90-100	70-95	24-60	4-51
	12-21	Clay	CL, CH	A-6, A-7	0	0	100	100	90-100	75-95	24-60	4-51
	21-80	Clay	CH, CL	A-6, A-7	0	0	100	100	90-100	75-95	24-60	4-51
StA:												
State-----------	0-8	Loamy sand, loamy coarse sand, sandy loam	SC-SM, SM	A-1, A-2-4, A-4	0	0	80-100	75-100	40-75	10-40	0-33	NP-13
	8-14	Loamy sand, loamy coarse sand, sandy loam	SM, SC-SM	A-1, A-2-4, A-4	0	0	80-100	75-100	40-75	10-40	0-33	NP-13
	14-49	Sandy clay loam, sandy loam	SC-SM, SC, CL	A-2, A-6	0	0	80-100	75-100	45-90	25-55	19-45	7-25
	49-55	Sandy loam, coarse sandy loam	SM	A-2, A-6	0	0	80-100	75-100	45-99	23-50	19-45	7-17
	55-80	Coarse sand, sand, loamy coarse sand	SP-SM, SM	A-1, A-2-4, A-3	0	0	80-100	75-100	40-75	3-30	0-27	NP-10
Eunola----------	0-7	Sandy loam, loamy sand	SM, SC-SM	A-4, A-2	0	0	80-100	75-100	40-75	10-40	0-32	NP-13
	7-10	Sandy loam, loamy sand	SM, SC-SM	A-2, A-4	0	0	80-100	75-100	40-75	10-40	0-32	NP-13
	10-38	Sandy clay loam, clay loam	SC, CL	A-2, A-6	0	0	80-100	75-100	60-100	25-80	27-44	12-25
	38-55	Sandy clay loam, clay loam	SC, CL	A-2, A-4, A-6	0	0	80-100	75-100	60-100	25-80	18-44	4-25
	55-80	Sandy loam, loamy sand, sand	SC-SM, SM	A-2, A-4, A-6	0	0	80-100	75-100	40-75	3-40	0-30	NP-12

Engineering Properties—Continued

Map symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments >10 inches	Fragments 3-10 inches	Percentage passing sieve number-- 4	10	40	200	Liquid limit	Plasticity index
	In				Pct	Pct					Pct	
ThA:												
Thursa----------	0-10	Loamy sand, sand, sandy loam	SM, SP-SM, SC-SM	A-2-4	0	0	80-100	75-100	40-75	3-40	0-32	NP-13
	10-35	Sandy clay loam, clay loam	SC, CL	A-6, A-7	0	0	80-100	75-100	60-100	25-80	29-44	13-25
	35-50	Sandy clay, clay, clay loam, sandy clay loam	CL, SC	A-6, A-7	0	0	80-100	75-100	60-100	25-90	29-66	13-43
	50-80	Clay, sandy clay, clay loam, sandy clay loam	SC, CL	A-6, A-7	0	0	80-100	75-100	60-100	25-90	29-66	13-43
ThB:												
Thursa----------	0-8	Loamy sand, sand, sandy loam	SM, SC-SM, SP-SM	A-2	0	0	80-100	75-100	40-75	3-40	0-24	NP-6
	8-34	Sandy clay loam, clay loam	CL, SC	A-6, A-7	0	0	80-100	75-100	60-100	25-80	29-44	13-25
	34-40	Sandy clay, clay, clay loam, sandy clay loam	CL, SC	A-6, A-7	0	0	80-100	75-100	60-100	25-95	29-66	13-43
	40-80	Clay, sandy clay, clay loam, sandy clay loam	SC, CL	A-6, A-7	0	0	80-100	75-100	60-100	25-95	29-66	13-43
TrB:												
Troup-----------	0-3	Sand	SP-SM, SM	A-2	0	0	100	100	50-70	5-15	0-24	NP-6
	3-46	Sand	SM, SP-SM	A-2	0	0	100	100	50-70	5-15	0-23	NP-6
	46-80	Sandy clay loam, sandy loam	SC, SC-SM, CL	A-2, A-4, A-6	0	0	100	100	60-90	30-55	24-43	9-25
TrC:												
Troup-----------	0-3	Sand	SP-SM, SM	A-2	0	0	100	100	50-70	5-15	0-24	NP-6
	3-46	Sand	SM, SP-SM	A-2	0	0	100	100	50-70	5-15	0-23	NP-6
	46-80	Sandy clay loam, sandy loam	CL, SC, SC-SM	A-2, A-4, A-6	0	0	100	100	60-90	30-55	24-43	9-25
UdD:												
Udorthents, refuse substratum-----	---	---	---	---	---	---	---	---	---	---	---	---
Pits------------	---	---	---	---	---	---	---	---	---	---	---	---

Engineering Properties—Continued

Map symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 inches	Fragments: 3-10 inches	Percentage passing sieve number--: 4	Percentage passing sieve number--: 10	Percentage passing sieve number--: 40	Percentage passing sieve number--: 200	Liquid limit	Plasticity index
	In				Pct	Pct					Pct	
VaC:												
Vaucluse--------	0-2	Loamy sand, sand	SP-SM, SM	A-2, A-3	0	0-11	80-100	75-100	40-75	3-30	10-25	NP
	2-6	Loamy sand, sand	SM, SP-SM	A-2, A-3	0	0-11	80-100	75-100	40-75	10-30	10-25	NP
	6-16	Sandy clay loam, sandy loam	SC-SM, SC	A-2, A-4, A-6	0	0-11	80-100	75-100	45-90	25-55	20-40	5-18
	16-25	Sandy clay loam, sandy loam	SC-SM, SC, SM	A-2, A-4, A-6	0	0-11	80-100	75-100	45-90	25-55	15-40	NP-20
	25-50	Sandy clay loam, sandy loam	SM, SC, SC-SM	A-2, A-4, A-6	0	0-11	80-100	75-100	45-90	25-55	15-30	NP-12
	50-80	Sandy loam, loamy sand, coarse sandy loam, sandy clay loam, silty clay loam	SC, SC-SM, SM, CL	A-2, A-4, A-6	0	0-11	80-100	75-100	40-100	10-95	15-30	NP-12
WaB:												
Wagram----------	0-4	Sand	SP-SM, SM	A-3, A-1, A-2	0	0	80-100	75-100	40-70	3-15	0-20	NP-3
	4-33	Sand	SP-SM, SM	A-1, A-3, A-2	0	0	80-100	75-100	40-70	3-15	0-19	NP-3
	33-80	Sandy clay loam	SC	A-6	0	0	80-100	75-100	60-90	25-55	20-44	6-25

Physical Soil Properties

(Entries under "Erosion factors--T" apply to the entire profile. Entries under "Wind erodibility group" and "Wind erodibility index" apply only to the surface layer. Absence of an entry indicates that data were not estimated.)

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensi- bility	Organic matter	Erosion factors Kw	Erosion factors Kf	Erosion factors T	Wind erodi- bility group	Wind erodi- bility index
	In	Pct	Pct	Pct	g/cc	um/sec	In/in	Pct	Pct					
AaB:														
Ailey----------------	0-8	85-100	0-15	0-10	1.40-1.55	42.00-141.00	0.04-0.05	0.0-0.9	0.4-1.0	.10	.10	4	1	160
	8-22	85-100	0-15	0-10	1.40-1.55	42.00-141.00	0.04-0.05	0.0-0.9	0.1-0.4	.10	.10			
	22-31	43-85	0-28	5-35	1.55-1.70	4.00-14.00	0.10-0.16	0.0-2.9	0.1-0.4	.15	.15			
	31-42	45-80	0-28	20-35	1.70-1.80	0.42-1.40	0.12-0.16	0.0-2.9	0.1-0.4	.15	.15			
	42-65	43-80	0-28	15-30	1.70-1.80	0.42-1.40	0.08-0.16	0.0-2.9	0.1-0.4	.15	.15			
	65-80	13-85	0-50	5-40	1.80-1.88	0.42-1.40	0.08-0.16	0.0-2.9	0.1-0.4	.15	.15			
Barnwell-------------	0-7	70-100	0-28	0-15	1.30-1.60	42.00-141.00	0.04-0.10	0.0-0.9	0.2-0.8	.15	.15	4	2	134
	7-10	70-100	0-28	0-15	1.35-1.60	42.00-141.00	0.04-0.10	0.0-0.9	0.0-0.5	.15	.15			
	10-36	43-85	0-28	5-35	1.45-1.60	4.00-42.00	0.10-0.16	0.0-2.9	0.0-0.5	.32	.32			
	36-50	20-80	0-39	20-59	1.45-1.70	1.40-4.00	0.09-0.16	0.0-2.9	0.0-0.5	.20	.20			
	50-56	20-85	0-39	0-59	1.45-1.85	1.40-4.00	0.08-0.16	0.0-2.9	0.0-0.5	.32	.32			
	56-80	10-89	0-50	0-59	1.45-1.70	1.40-42.00	0.08-0.16	0.0-2.9	0.0-0.5	.32	.32			
AcC:														
Ailey----------------	0-8	85-100	0-15	0-10	1.40-1.55	42.00-141.00	0.04-0.05	0.0-0.9	0.1-0.8	.10	.10	4	1	160
	8-22	85-100	0-15	0-10	1.40-1.55	42.00-141.00	0.04-0.05	0.0-0.9	0.0-0.0	.10	.10			
	22-31	43-85	0-28	5-35	1.55-1.70	4.00-14.00	0.10-0.16	0.0-2.9	0.0-0.0	.15	.15			
	31-42	45-80	0-28	20-35	1.70-1.80	0.42-1.40	0.12-0.16	0.0-2.9	0.0-0.0	.15	.15			
	42-65	43-80	0-28	15-35	1.80-1.95	0.42-1.40	0.08-0.16	0.0-2.9	0.0-0.0	.15	.15			
	65-80	13-85	0-50	5-40	1.55-1.70	0.42-1.40	0.08-0.16	0.0-2.9	0.0-0.0	.15	.15			
Troup----------------	0-3	85-100	0-15	1-10	1.30-1.70	42.00-141.00	0.05-0.10	0.0-2.9	0.5-1.0	.10	.10	5	1	220
	3-46	85-100	0-15	1-10	1.30-1.70	42.00-141.00	0.05-0.10	0.0-2.9	0.2-0.5	.10	.10			
	46-80	52-85	0-28	15-35	1.40-1.60	4.00-42.00	0.10-0.16	0.0-2.9	0.0-0.5	.20	.20			
Vaucluse-------------	0-2	70-100	0-28	2-10	1.35-1.75	42.00-141.00	0.04-0.10	0.0-0.9	0.2-1.0	.15	.15	3	2	134
	2-6	70-100	0-28	2-10	1.35-1.75	42.00-141.00	0.04-0.10	0.0-0.9	0.2-0.5	.15	.15			
	6-16	52-85	0-28	18-35	1.35-1.75	4.00-42.00	0.12-0.16	1.0-2.9	0.0-0.5	.24	.24			
	16-25	52-85	0-28	18-45	1.75-1.95	0.01-4.00	0.12-0.16	1.0-2.9	0.0-0.5	.24	.24			
	25-50	52-85	0-28	5-30	1.55-1.90	4.00-42.00	0.12-0.16	1.0-2.9	0.0-0.5	.17	.17			
	50-80	13-90	0-50	5-30	1.55-1.90	4.00-42.00	0.08-0.15	1.0-2.9	0.0-0.5	.17	.17			

Physical Soil Properties—Continued

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensibility	Organic matter	Erosion factors Kw	Kf	T	Wind erodibility group	Wind erodibility index
	In	Pct	Pct	Pct	g/cc	um/sec	In/in	Pct	Pct					
AeD:														
Ailey----------------	0-8	85-100	0-15	0-10	1.40-1.55	42.00-141.00	0.04-0.05	0.0-0.9	0.4-0.8	.10	.10	4	1	160
	8-22	85-100	0-15	0-10	1.40-1.55	42.00-141.00	0.04-0.05	0.0-0.9	0.0-0.0	.10	.10			
	22-31	43-85	0-28	5-35	1.55-1.70	4.00-14.00	0.10-0.16	0.0-2.9	0.0-0.0	.15	.15			
	31-42	45-80	0-28	20-35	1.70-1.80	0.42-1.40	0.12-0.16	0.0-2.9	0.0-0.0	.15	.15			
	42-65	43-80	0-28	5-35	1.80-1.95	0.42-1.40	0.08-0.16	0.0-2.9	0.0-0.0	.15	.15			
	65-80	13-85	0-50	5-40	1.55-1.70	0.42-1.40	0.08-0.16	0.0-2.9	0.0-0.0	.15	.15			
Vaucluse-------------	0-2	70-100	0-28	2-10	1.35-1.75	42.00-141.00	0.04-0.10	0.0-0.9	0.2-1.0	.15	.15	3	2	134
	2-6	70-100	0-28	2-10	1.35-1.75	42.00-141.00	0.04-0.10	0.0-0.9	0.2-0.5	.15	.15			
	6-16	52-85	0-28	18-35	1.35-1.75	4.00-42.00	0.12-0.16	1.0-2.9	0.0-0.5	.24	.24			
	16-25	52-85	0-28	18-45	1.75-1.95	0.01-4.00	0.12-0.16	1.0-2.9	0.0-0.5	.24	.24			
	25-50	52-85	0-28	5-30	1.55-1.90	4.00-42.00	0.12-0.16	1.0-2.9	0.0-0.5	.17	.17			
	50-80	13-90	0-50	5-30	1.55-1.90	4.00-42.00	0.08-0.15	1.0-2.9	0.0-0.5	.17	.17			
Troup----------------	0-3	85-100	0-15	1-10	1.30-1.70	42.00-141.00	0.05-0.10	0.0-2.9	0.5-1.0	.10	.10	5	1	220
	3-46	85-100	0-15	1-10	1.30-1.70	42.00-141.00	0.05-0.10	0.0-2.9	0.2-0.5	.10	.10			
	46-80	52-85	0-28	15-35	1.40-1.60	4.00-42.00	0.10-0.16	0.0-2.9	0.0-0.5	.20	.20			
AgB:														
Alaga----------------	0-7	75-98	1-23	2-12	1.60-1.75	42.00-141.00	0.04-0.10	0.0-0.9	0.5-1.0	.10	.10	5	1	220
	7-16	75-98	2-23	2-12	1.60-1.75	42.00-141.00	0.04-0.05	0.0-0.9	0.0-0.5	.10	.10			
	16-36	75-98	2-23	2-12	1.60-1.75	42.00-141.00	0.04-0.10	0.0-0.9	0.0-0.5	.10	.10			
	36-80	75-98	1-23	1-10	1.60-1.75	42.00-141.00	0.04-0.10	0.0-0.9	0.0-0.5	.10	.10			
AoB:														
Alaga----------------	0-9	75-98	1-23	2-12	1.60-1.70	42.00-141.00	0.04-0.05	0.0-0.9	0.5-1.0	.10	.10	5	1	220
	9-63	75-98	2-23	2-12	1.55-1.65	42.00-141.00	0.08-0.10	0.0-0.9	0.0-0.5	.10	.10			
	63-80	75-98	0-23	1-12	1.70-1.80	42.00-141.00	0.03-0.05	0.0-0.9	0.0-0.5	.10	.10			
Lucknow--------------	0-8	85-100	0-15	1-10	1.30-1.60	42.00-141.00	0.03-0.05	0.0-0.9	0.2-0.8	.10	.10	5	1	180
	8-48	85-100	0-15	1-10	1.30-1.60	42.00-141.00	0.03-0.05	0.0-0.9	0.2-0.5	.10	.10			
	48-80	43-85	0-28	12-35	1.60-1.70	1.40-14.00	0.10-0.16	1.0-2.9	0.2-0.5	.20	.20			

Physical Soil Properties—Continued

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensi-bility	Organic matter	Erosion factors Kw	Kf	T	Wind erodi-bility group	Wind erodi-bility index
	In	Pct	Pct	Pct	g/cc	um/sec	In/in	Pct	Pct					
ApB:														
Alpin----------------	0-10	85-100	0-15	0-10	1.35-1.55	42.00-141.00	0.04-0.05	0.0-0.9	0.1-0.7	.10	.10	5	1	180
	10-44	85-100	0-15	0-10	1.40-1.55	42.00-141.00	0.04-0.05	0.0-0.9	0.0-0.5	.10	.10			
	44-80	70-100	0-29	0-15	1.45-1.65	14.00-42.00	0.04-0.10	0.0-0.9	0.0-0.5	.10	.10			
ApD:														
Alpin----------------	0-10	85-100	0-15	0-10	1.35-1.55	42.00-141.00	0.04-0.05	0.0-0.9	0.1-0.7	.10	.10	5	1	180
	10-49	85-100	0-15	0-10	1.40-1.55	42.00-141.00	0.04-0.05	0.0-0.9	0.0-0.5	.10	.10			
	49-80	70-100	0-29	0-15	1.45-1.65	14.00-42.00	0.04-0.10	0.0-0.9	0.0-0.5	.10	.10			
AuB:														
Autryville-----------	0-11	85-100	0-15	0-10	1.60-1.70	42.00-141.00	0.04-0.05	0.0-0.9	0.2-0.8	.10	.10	5	1	160
	11-21	85-100	0-15	0-10	1.60-1.70	42.00-141.00	0.04-0.05	0.0-0.9	0.2-0.5	.10	.10			
	21-31	43-85	0-28	10-30	1.40-1.60	14.00-42.00	0.10-0.16	0.0-2.9	0.2-0.5	.10	.10			
	31-51	70-100	0-28	0-15	1.60-1.70	42.00-141.00	0.04-0.10	0.0-0.9	0.2-0.5	.10	.10			
	51-80	43-85	0-28	5-30	1.40-1.60	4.00-14.00	0.10-0.16	0.0-2.9	0.2-0.5	.17	.17			
BaB:														
Barnwell-------------	0-7	70-100	0-28	0-15	1.30-1.60	42.00-141.00	0.04-0.10	0.0-0.9	0.2-0.8	.15	.15	4	2	134
	7-11	70-100	0-28	0-15	1.35-1.60	42.00-141.00	0.04-0.10	0.0-0.9	0.0-0.5	.15	.15			
	11-36	43-85	0-28	5-35	1.45-1.60	4.00-42.00	0.10-0.16	0.0-2.9	0.0-0.5	.32	.32			
	36-50	20-80	0-39	20-59	1.45-1.70	1.40-4.00	0.09-0.16	0.0-2.9	0.0-0.5	.20	.20			
	50-56	20-85	0-39	0-59	1.45-1.85	1.40-4.00	0.08-0.16	0.0-2.9	0.0-0.5	.32	.32			
	56-80	10-89	0-50	0-59	1.45-1.70	1.40-42.00	0.08-0.16	0.0-2.9	0.0-0.5	.32	.32			
BbB2:														
Barnwell-------------	0-6	51-100	0-40	0-20	1.40-1.50	14.00-42.00	0.10-0.13	0.0-2.9	0.0-0.8	.15	.15	3	3	86
	6-36	43-85	0-28	5-35	1.45-1.60	4.00-42.00	0.10-0.16	0.0-2.9	0.0-0.5	.32	.32			
	36-50	20-80	0-39	20-59	1.45-1.70	1.40-4.00	0.09-0.16	0.0-2.9	0.0-0.5	.20	.20			
	50-56	20-85	0-39	0-59	1.45-1.85	1.40-4.00	0.08-0.16	0.0-2.9	0.0-0.5	.32	.32			
	56-80	10-89	0-50	0-59	1.45-1.70	4.00-42.00	0.08-0.16	0.0-2.9	0.0-0.5	.32	.32			

Physical Soil Properties—Continued

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensi-bility	Organic matter	Erosion factors Kw	Kf	T	Wind erodi-bility group	Wind erodi-bility index
	In	Pct	Pct	Pct	g/cc	um/sec	In/in	Pct	Pct					
BcC:														
Barnwell-------------	0-7	70-100	0-28	0-15	1.30-1.60	42.00-141.00	0.04-0.10	0.0-2.9	0.0-0.8	.15	.15	3	2	134
	7-10	70-100	0-28	0-15	1.35-1.60	42.00-141.00	0.04-0.10	0.0-2.9	0.0-0.5	.15	.15			
	10-36	43-85	0-28	5-35	1.45-1.60	4.00-42.00	0.10-0.16	0.0-2.9	0.0-0.5	.32	.32			
	36-50	20-80	0-39	20-59	1.45-1.70	1.40-4.00	0.09-0.16	0.0-2.9	0.0-0.5	.20	.20			
	50-56	20-85	0-39	0-59	1.45-1.85	1.40-4.00	0.08-0.16	0.0-2.9	0.0-0.5	.32	.32			
	56-80	10-89	0-50	0-59	1.45-1.70	1.40-42.00	0.08-0.14	0.0-2.9	0.0-0.5	.32	.32			
Cowarts--------------	0-6	70-100	0-30	0-15	1.30-1.70	42.00-141.00	0.04-0.10	0.0-2.9	0.5-1.0	.15	.15	4	2	134
	6-29	43-85	0-28	5-35	1.30-1.50	1.40-14.00	0.10-0.16	0.0-2.9	0.0-0.5	.28	.28			
	29-80	13-85	0-50	5-40	1.65-1.80	0.01-4.00	0.08-0.14	0.0-2.9	0.0-0.5	.24	.24			
Troup----------------	0-3	85-100	0-15	1-10	1.30-1.70	42.00-141.00	0.05-0.10	0.0-2.9	0.5-1.0	.10	.10	5	1	220
	3-46	85-100	0-15	1-10	1.30-1.70	42.00-141.00	0.05-0.10	0.0-2.9	0.2-0.5	.10	.10			
	46-80	52-85	0-28	15-35	1.40-1.60	4.00-42.00	0.10-0.16	0.0-2.9	0.0-0.5	.20	.20			
BoB:														
Bonneau--------------	0-8	85-100	0-15	0-10	1.30-1.70	42.00-141.00	0.04-0.05	0.0-0.9	0.5-1.0	.10	.10	5	1	220
	8-24	85-100	0-15	0-10	1.30-1.70	42.00-141.00	0.04-0.05	0.0-0.9	0.0-0.5	.10	.10			
	24-51	43-85	0-28	12-35	1.40-1.60	4.00-42.00	0.10-0.16	0.0-2.9	0.0-0.5	.20	.20			
	51-80	45-80	0-28	20-40	1.40-1.60	4.00-14.00	0.10-0.16	0.0-2.9	0.0-0.5	.20	.20			
BuA:														
Butters--------------	0-9	85-100	0-28	5-10	1.20-1.40	42.00-141.00	0.03-0.05	0.0-0.9	0.0-1.0	.15	.15	5	1	160
	9-12	70-100	0-28	4-15	1.30-1.60	42.00-141.00	0.04-0.10	0.0-0.9	0.0-0.5	.10	.10			
	12-30	43-85	0-28	10-28	1.40-1.60	14.00-42.00	0.08-0.16	0.0-2.9	0.0-0.5	.15	.15			
	30-49	70-100	0-28	1-10	1.50-1.70	42.00-141.00	0.04-0.10	0.0-0.9	0.0-0.5	.10	.10			
	49-80	43-85	0-28	10-28	1.30-1.50	4.00-14.00	0.10-0.16	0.0-2.9	0.0-0.5	.17	.17			

Physical Soil Properties—Continued

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensi-bility	Organic matter	Erosion factors Kw	Kf	T	Wind erodi-bility group	Wind erodi-bility index
	In	Pct	Pct	Pct	g/cc	um/sec	In/in	Pct	Pct					
CaB:														
Candor----------------	0-8	85-100	0-15	0-10	1.60-1.70	42.00-141.00	0.03-0.05	0.0-0.9	0.2-0.8	.10	.10	5	1	220
	8-25	85-100	0-15	0-10	1.60-1.70	42.00-141.00	0.03-0.05	0.0-0.9	0.0-0.5	.10	.10			
	25-36	70-90	0-20	0-15	1.55-1.70	42.00-141.00	0.06-0.10	0.0-0.9	0.0-0.5	.10	.10			
	36-61	85-100	0-15	0-10	1.60-1.70	42.00-141.00	0.03-0.05	0.0-0.9	0.0-0.5	.10	.10			
	61-80	43-85	0-28	10-35	1.35-1.60	4.00-14.00	0.08-0.16	0.0-2.9	0.0-0.5	.20	.20			
CcA:														
Chastain--------------	0-4	23-52	28-50	7-27	1.20-1.40	1.40-4.00	0.14-0.19	1.0-2.9	1.0-2.0	.32	.32	5	5	56
	4-56	20-45	15-53	27-60	1.30-1.50	0.42-1.40	0.09-0.13	1.0-2.9	0.5-1.0	.37	.37			
	56-80	85-100	0-15	0-10	1.50-1.70	42.00-141.00	0.04-0.05	0.0-0.9	0.5-1.0	.10	.10			
Chewacla--------------	0-1	23-52	28-50	10-35	1.30-1.60	4.00-14.00	0.17-0.19	0.0-2.9	1.0-2.0	.28	.28	5	5	56
	1-38	10-85	0-50	12-35	1.30-1.50	4.00-14.00	0.10-0.19	0.0-2.9	0.5-1.0	.32	.32			
	38-62	10-85	0-50	12-35	1.30-1.50	4.00-14.00	0.10-0.19	0.0-2.9	0.5-1.0	.32	.32			
	62-80	45-100	0-18	8-30	1.30-1.50	14.00-42.00	0.04-0.16	0.0-2.9	0.5-1.0	.24	.24			
ChA:														
Chewacla--------------	0-1	23-52	28-50	10-35	1.30-1.60	4.00-14.00	0.17-0.19	0.0-2.9	1.0-2.0	.28	.28	5	5	56
	1-38	10-85	0-50	12-35	1.30-1.50	4.00-14.00	0.10-0.19	0.0-2.9	0.5-1.0	.32	.32			
	38-62	10-85	0-50	12-35	1.30-1.50	4.00-14.00	0.10-0.19	0.0-2.9	0.5-1.0	.32	.32			
	62-80	45-100	0-18	8-30	1.30-1.50	14.00-42.00	0.04-0.16	0.0-2.9	0.5-1.0	.24	.24			
Chastain--------------	0-4	23-52	28-50	7-27	1.20-1.40	1.40-4.00	0.14-0.19	1.0-2.9	1.0-2.0	.32	.32	5	5	56
	4-56	20-45	15-53	27-60	1.30-1.50	0.42-1.40	0.09-0.13	1.0-2.9	0.5-1.0	.37	.37			
	56-80	85-100	0-15	0-10	1.50-1.70	42.00-141.00	0.04-0.05	0.0-0.9	0.5-1.0	.10	.10			
CwD:														
Cowarts---------------	0-6	70-100	0-30	0-15	1.30-1.70	42.00-141.00	0.04-0.10	0.0-2.9	0.5-1.0	.15	.15	4	2	134
	6-29	43-85	0-28	5-35	1.30-1.50	1.40-14.00	0.10-0.16	0.0-2.9	0.0-0.5	.28	.28			
	29-80	13-85	0-50	5-40	1.65-1.80	0.01-4.00	0.08-0.14	0.0-2.9	0.0-0.5	.24	.24			
CxA:														
Coxville--------------	0-7	43-85	0-28	5-27	1.45-1.65	4.00-14.00	0.12-0.14	0.0-2.9	0.5-2.0	.24	.24	5	3	86
	7-80	20-65	0-30	35-60	1.25-1.45	1.40-4.00	0.09-0.14	0.0-2.9	0.0-0.8	.32	.32			

Physical Soil Properties—Continued

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensi-bility	Organic matter	Erosion factors Kw	Kf	T	Wind erodi-bility group	Wind erodi-bility index
	In	Pct	Pct	Pct	g/cc	um/sec	In/in	Pct	Pct					
DaA:														
Dorovan---------------	0-10	0-20	40-73	27-40	1.40-1.65	4.00-14.00	0.20-0.22	1.0-2.9	0.0-1.0	.28	.28	5	4L	86
	10-70	55-100	0-30	0-20	0.25-0.40	4.00-14.00	0.35-0.50	0.0-0.9	21-30	.24	.24			
	70-80	85-100	0-15	0-10	1.40-1.65	42.30-141.10	0.03-0.05	0.0-0.9	0.0-1.0	.17	.17			
DoA:														
Dothan----------------	0-8	70-100	---	0-15	1.30-1.60	42.00-141.00	0.04-0.10	0.0-0.9	0.2-0.8	.15	.15	5	2	134
	8-37	20-85	0-30	18-35	1.40-1.60	4.00-42.00	0.10-0.16	0.0-2.9	0.0-0.5	.28	.28			
	37-80	20-80	0-39	20-59	1.45-1.70	1.40-4.00	0.09-0.16	0.0-2.9	0.0-0.5	.28	.28			
DoB:														
Dothan----------------	0-8	70-100	0-30	0-15	1.30-1.60	42.00-141.00	0.04-0.10	0.0-0.9	0.2-0.8	.15	.15	5	2	134
	8-37	20-85	0-30	5-35	1.40-1.60	4.00-42.00	0.10-0.16	0.0-2.9	0.0-0.5	.28	.28			
	37-80	40-80	0-30	20-40	1.45-1.70	1.40-4.00	0.10-0.16	0.0-2.9	0.0-0.5	.28	.28			
DtB2:														
Dothan----------------	0-4	51-100	0-40	5-20	1.30-1.60	14.00-42.00	0.10-0.13	0.0-0.9	0.0-0.5	.15	.15	3	3	86
	4-37	43-85	0-28	18-35	1.40-1.60	4.00-42.00	0.10-0.16	0.0-2.9	0.0-0.5	.28	.28			
	37-80	45-85	---	18-40	1.45-1.70	1.40-4.00	0.10-0.16	0.0-2.9	0.0-0.5	.28	.28			
EuA:														
Eunola----------------	0-7	43-90	0-30	0-20	1.35-1.65	14.00-141.00	0.08-0.13	0.0-2.9	0.2-0.8	.20	.20	5	3	86
	7-10	43-90	0-30	0-20	1.35-1.65	14.00-141.00	0.08-0.13	0.0-2.9	0.2-0.5	.20	.20			
	10-38	35-80	0-30	18-35	1.35-1.65	1.40-14.00	0.10-0.16	0.0-2.9	0.2-0.5	.28	.28			
	38-55	35-80	0-30	8-35	1.35-1.65	1.40-14.00	0.10-0.16	0.0-2.9	0.0-0.5	.24	.24			
	55-80	43-100	0-30	0-18	1.20-1.35	14.00-141.00	0.04-0.13	0.0-2.9	0.0-0.5	.17	.17			
FaA:														
Faceville-------------	0-7	70-100	0-30	0-15	1.45-1.65	42.00-141.00	0.04-0.10	0.0-0.9	0.2-0.8	.17	.17	5	2	134
	7-13	70-100	0-30	0-15	1.45-1.65	42.00-141.00	0.04-0.10	0.0-0.9	0.2-0.5	.17	.17			
	13-80	35-65	0-30	35-60	1.25-1.60	4.00-14.00	0.09-0.14	0.0-2.9	0.0-0.5	.37	.37			

Physical Soil Properties—Continued

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensi-bility	Organic matter	Erosion factors Kw	Kf	T	Wind erodi-bility group	Wind erodi-bility index
	In	Pct	Pct	Pct	g/cc	um/sec	In/in	Pct	Pct					
FaB:														
Faceville------------	0-7	70-100	0-30	2-15	1.45-1.65	42.00-141.00	0.04-0.10	0.0-0.9	0.2-0.8	.17	.17	5	2	134
	7-13	70-100	0-30	2-15	1.45-1.65	42.00-141.00	0.04-0.10	0.0-0.9	0.0-0.5	.17	.17			
	13-80	35-65	0-30	35-60	1.25-1.60	4.00-14.00	0.09-0.14	0.0-2.9	0.0-0.5	.37	.37			
FbB2:														
Faceville------------	0-2	51-100	0-30	0-20	1.40-1.60	14.00-42.00	0.10-0.13	0.0-2.9	0.2-0.8	.28	.28	5	3	86
	2-80	35-65	0-30	35-60	1.25-1.60	4.00-14.00	0.09-0.14	0.0-2.9	0.0-0.5	.37	.37			
FoB:														
Foxworth-------------	0-4	85-100	0-9	1-8	1.25-1.45	42.00-141.00	0.03-0.05	0.0-0.9	0.2-0.8	.10	.10	5	1	180
	4-80	85-100	0-9	1-8	1.40-1.55	42.00-141.00	0.03-0.05	0.0-0.9	0.0-0.5	.10	.10			
FuB:														
Fuquay---------------	0-8	70-100	0-29	0-15	1.60-1.70	42.00-141.00	0.03-0.10	0.0-0.9	0.2-0.8	.10	.10	5	1	220
	8-27	70-100	0-29	0-15	1.60-1.70	42.00-141.00	0.03-0.10	0.0-0.9	0.0-0.5	.10	.10			
	27-42	45-80	0-28	20-35	1.40-1.60	4.00-14.00	0.12-0.16	0.0-2.9	0.0-0.5	.20	.20			
	42-80	35-80	0-30	20-35	1.40-1.60	0.42-4.00	0.10-0.16	0.0-2.9	0.0-0.5	.20	.20			
GoA:														
Goldsboro------------	0-8	53-85	0-30	5-20	1.40-1.60	14.00-42.00	0.10-0.15	0.0-2.9	0.5-2.0	.20	.20	5	3	86
	8-35	45-80	0-30	18-30	1.30-1.50	4.00-42.00	0.10-0.16	0.0-2.9	0.0-0.2	.24	.24			
	35-80	35-80	0-30	20-34	1.30-1.40	4.00-14.00	0.10-0.16	0.0-2.9	0.0-0.2	.24	.24			
JhA:														
Johns----------------	0-7	70-100	0-30	0-15	1.45-1.65	42.00-141.00	0.04-0.10	0.0-2.9	0.2-0.8	.15	.15	5	2	134
	7-15	70-100	0-30	0-15	1.45-1.65	42.00-141.00	0.04-0.10	0.0-2.9	0.0-0.5	.20	.20			
	15-36	53-85	0-30	18-35	1.40-1.60	4.00-42.00	0.10-0.16	0.0-2.9	0.0-0.5	.24	.24			
	36-80	70-100	0-30	0-15	1.60-1.70	42.00-141.00	0.03-0.10	0.0-2.9	0.0-0.5	.10	.10			
JoA:														
Johnston-------------	0-5	50-95	0-30	0-20	0.25-0.40	4.00-141.00	0.13-0.45	0.0-0.9	10-30	.24	.24	5	5	56
	5-31	50-95	0-30	0-20	1.30-1.55	4.00-141.00	0.10-0.19	0.0-2.9	1.0-10	.20	.20			
	31-80	85-100	0-15	0-10	1.55-1.65	42.00-141.00	0.03-0.05	0.0-2.9	0.3-1.0	.17	.17			

Physical Soil Properties—Continued

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensi-bility	Organic matter	Erosion factors Kw	Kf	T	Wind erodi-bility group	Wind erodi-bility index
	In	Pct	Pct	Pct	g/cc	um/sec	In/in	Pct	Pct					
JzA:														
Johnston	0-5	50-95	0-30	0-20	0.25-0.40	4.00-141.00	0.13-0.45	0.0-0.9	10-30	.24	.24	5	5	56
	5-31	50-95	0-30	0-20	1.30-1.55	4.00-141.00	0.10-0.19	0.0-2.9	1.0-10	.20	.20			
	31-80	85-100	0-15	0-10	1.55-1.65	42.00-141.00	0.03-0.05	0.0-2.9	0.3-1.0	.17	.17			
Mouzon	0-8	50-95	0-30	5-18	1.40-1.60	4.00-42.00	0.08-0.19	0.0-0.9	0.5-2.0	.20	.20	5	3	86
	8-31	40-80	0-30	18-40	1.30-1.50	0.42-1.40	0.10-0.16	0.0-2.9	0.2-1.0	.20	.20			
	31-46	45-90	0-30	5-35	1.30-1.50	1.40-42.00	0.08-0.16	0.0-2.9	0.0-1.0	.20	.20			
	46-80	70-100	0-30	0-15	1.30-1.60	42.00-141.00	0.03-0.10	0.0-2.9	0.0-1.0	.15	.15			
KaA:														
Kalmia	0-6	70-100	0-30	0-12	1.60-1.75	42.00-141.00	0.04-0.10	0.0-2.9	0.2-0.8	.15	.15	5	2	134
	6-23	43-85	0-30	18-35	1.40-1.60	4.00-42.00	0.10-0.16	0.0-2.9	0.0-0.5	.24	.24			
	23-27	43-85	0-30	0-20	1.40-1.60	4.00-42.00	0.10-0.16	0.0-2.9	0.0-0.5	.24	.24			
	27-80	70-100	0-30	0-10	1.60-1.75	42.00-141.00	0.03-0.10	0.0-2.9	0.0-0.5	.10	.10			
LaB:														
Lakeland	0-5	85-100	0-10	2-8	1.35-1.65	42.00-141.00	0.04-0.05	0.0-2.9	0.0-1.0	.10	.10	5	1	180
	5-30	85-100	0-10	1-6	1.50-1.60	42.00-141.00	0.04-0.05	0.0-2.9	0.0-0.5	.10	.10			
	30-80	85-100	0-10	1-6	1.50-1.60	42.00-141.00	0.04-0.05	0.0-2.9	0.0-0.5	.10	.10			
LaD:														
Lakeland	0-5	85-100	0-10	2-8	1.35-1.65	42.00-141.00	0.04-0.05	0.0-2.9	0.5-1.0	.10	.10	5	1	180
	5-80	85-100	0-10	1-6	1.50-1.60	42.00-141.00	0.04-0.05	0.0-2.9	0.0-0.5	.10	.10			
LbB:														
Lucknow	0-8	85-100	0-15	1-10	1.30-1.60	42.00-141.00	0.03-0.05	0.0-0.9	0.2-0.8	.10	.10	5	1	180
	8-48	85-100	0-15	1-10	1.30-1.60	42.00-141.00	0.03-0.05	0.0-0.9	0.2-0.5	.10	.10			
	48-80	43-85	0-28	12-35	1.60-1.70	1.40-14.00	0.10-0.16	1.0-2.9	0.2-0.5	.20	.20			

Physical Soil Properties—Continued

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensi-bility	Organic matter	Erosion factors Kw	Kf	T	Wind erodi-bility group	Wind erodi-bility index
	In	Pct	Pct	Pct	g/cc	um/sec	In/in	Pct	Pct					
LcB:														
Lucy-----------------	0-7	85-100	0-15	1-10	1.30-1.70	42.00-141.00	0.04-0.05	0.0-2.9	0.5-1.0	.10	.10	5	1	220
	7-22	85-100	0-15	1-10	1.30-1.70	42.00-141.00	0.04-0.05	0.0-2.9	0.2-1.0	.10	.10			
	22-80	43-85	0-28	10-35	1.40-1.60	4.00-14.00	0.10-0.16	0.0-2.9	0.0-1.0	.24	.24			
LuA:														
Lumbee---------------	0-8	45-85	0-30	4-25	1.55-1.70	14.00-42.00	0.10-0.19	0.0-2.9	2.0-4.0	.24	.24	5	3	86
	8-28	35-80	0-30	18-35	1.30-1.45	4.00-14.00	0.10-0.16	0.0-2.9	0.5-1.0	.32	.32			
	28-80	85-100	0-15	0-10	1.60-1.70	42.00-141.00	0.03-0.05	0.0-2.9	0.0-0.2	.10	.10			
LyA:														
Lynchburg------------	0-7	51-100	0-30	5-20	1.30-1.60	14.00-42.00	0.10-0.13	0.0-2.9	0.5-5.0	.20	.20	5	3	86
	7-14	43-85	0-28	18-35	1.30-1.50	4.00-42.00	0.10-0.16	0.0-2.9	0.0-0.5	.20	.20			
	14-80	35-80	0-30	18-35	1.30-1.50	4.00-14.00	0.10-0.16	0.0-2.9	0.0-0.5	.20	.20			
MaA:														
Marvyn---------------	0-6	70-100	0-28	2-15	1.30-1.60	42.00-141.00	0.04-0.10	0.0-2.9	0.5-1.0	.15	.15	5	1	180
	6-47	20-85	0-30	18-35	1.75-1.95	4.00-14.00	0.10-0.16	0.0-2.9	0.0-0.5	.24	.24			
	47-80	45-100	0-28	5-30	1.55-1.90	4.00-141.00	0.04-0.16	0.0-2.9	0.0-0.5	.17	.17			
MaB:														
Marvyn---------------	0-2	70-100	0-28	2-10	1.30-1.60	42.00-141.00	0.04-0.10	0.0-2.9	0.5-1.0	.15	.15	5	1	180
	2-47	20-85	0-30	18-45	1.75-1.95	4.00-14.00	0.10-0.16	0.0-2.9	0.0-0.5	.24	.24			
	47-80	45-100	0-28	5-30	1.55-1.90	4.00-141.00	0.04-0.16	0.0-2.9	0.0-0.5	.17	.17			
MeA:														
Meggett--------------	0-5	45-85	0-40	0-20	1.20-1.40	4.00-42.00	0.10-0.19	0.0-2.9	0.2-1.0	.20	.20	5	3	86
	5-51	15-75	20-40	35-60	1.50-1.75	0.42-4.00	0.09-0.16	3.0-5.9	0.0-0.5	.32	.32			
	51-80	50-100	0-30	0-20	1.50-1.60	14.00-141.00	0.04-0.16	0.0-2.9	0.0-0.5	.10	.10			

Physical Soil Properties—Continued

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensi-bility	Organic matter	Erosion factors Kw	Kf	T	Wind erodi-bility group	Wind erodi-bility index
	In	Pct	Pct	Pct	g/cc	um/sec	In/in	Pct	Pct					
MyA:														
Myatt----------------	0-7	52-100	0-30	7-20	1.30-1.60	14.00-42.00	0.08-0.16	0.0-2.9	0.2-1.0	.24	.24	5	3	86
	7-13	45-85	0-35	7-20	1.30-1.60	14.00-42.00	0.10-0.19	0.0-2.9	0.0-0.5	.24	.24			
	13-50	20-80	20-45	18-40	1.30-1.50	1.40-14.00	0.10-0.16	0.0-2.9	0.0-0.5	.28	.28			
	50-80	52-100	7-15	0-20	1.30-1.60	14.00-141.00	0.04-0.13	0.0-2.9	0.0-0.5	.28	.28			
Paxville-------------	0-13	52-100	0-30	0-20	1.30-1.40	14.00-42.00	0.08-0.13	0.0-2.9	0.2-2.0	.20	.20	5	3	86
	13-48	20-80	0-35	20-35	1.20-1.50	4.00-14.00	0.10-0.16	0.0-2.9	0.0-1.0	.15	.15			
	48-80	52-100	0-30	0-15	1.30-1.50	42.00-141.00	0.04-0.10	0.0-2.9	0.0-0.5	.10	.10			
NaB2:														
Nankin---------------	0-6	45-100	0-27	7-35	1.45-1.55	4.00-42.00	0.10-0.16	1.0-2.9	0.0-0.8	.28	.15	3	5	56
	6-51	0-65	0-30	35-59	1.25-1.35	1.40-4.00	0.09-0.14	1.0-2.9	0.0-0.5	.24	.20			
	51-80	20-90	0-30	18-55	1.45-1.55	1.40-14.00	0.09-0.16	1.0-2.9	0.0-0.5	.24	.15			
NbC:														
Nankin---------------	0-12	70-100	0-30	0-15	1.45-1.55	42.00-141.00	0.04-0.10	0.0-2.9	0.0-1.0	.17	.17	3	2	134
	12-49	20-95	0-30	35-60	1.35-1.45	1.40-4.00	0.09-0.14	0.0-2.9	0.0-0.5	.24	.24			
	49-80	20-95	0-30	18-55	1.60-1.70	1.40-14.00	0.09-0.16	0.0-2.9	0.0-0.5	.24	.24			
Lucy-----------------	0-7	85-100	0-15	1-10	1.30-1.70	42.00-141.00	0.04-0.05	0.0-2.9	0.5-1.0	.10	.10	5	1	220
	7-22	85-100	0-15	1-10	1.30-1.70	42.00-141.00	0.04-0.05	0.0-2.9	0.2-1.0	.10	.10			
	22-80	43-85	0-28	10-35	1.40-1.60	4.00-14.00	0.10-0.16	0.0-2.9	0.0-1.0	.24	.24			
NbD:														
Nankin---------------	0-12	70-100	0-30	0-15	1.45-1.55	14.00-141.00	0.04-0.10	0.0-2.9	0.2-1.0	.17	.17	3	2	134
	12-49	20-95	0-30	35-60	1.35-1.45	1.40-4.00	0.09-0.13	0.0-2.9	0.0-0.5	.24	.24			
	49-80	20-95	0-30	18-55	1.45-1.70	1.40-14.00	0.09-0.16	0.0-2.9	0.0-0.5	.24	.24			
Lucy-----------------	0-7	85-100	0-15	1-10	1.30-1.70	42.00-141.00	0.04-0.05	0.0-2.9	0.5-1.0	.10	.10	5	1	220
	7-22	85-100	0-15	1-10	1.30-1.70	42.00-141.00	0.04-0.05	0.0-2.9	0.2-1.0	.10	.10			
	22-80	43-85	0-28	10-35	1.40-1.60	4.00-14.00	0.10-0.16	0.0-2.9	0.0-1.0	.24	.24			

Physical Soil Properties—Continued

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensi-bility	Organic matter	Erosion factors Kw	Kf	T	Wind erodi-bility group	Wind erodi-bility index
	In	Pct	Pct	Pct	g/cc	um/sec	In/in	Pct	Pct					
NeB:														
Noboco---------------	0-13	70-91	0-30	2-8	1.55-1.80	42.00-141.00	0.08-0.10	0.0-0.9	0.2-1.0	.10	.10	5	2	134
	13-34	45-80	0-30	18-35	1.45-1.75	4.00-14.00	0.12-0.16	1.0-2.9	0.0-0.5	.24	.24			
	34-80	45-80	0-30	18-35	1.45-1.75	1.40-14.00	0.11-0.16	1.0-2.9	0.0-0.5	.24	.24			
NmB2:														
Noboco---------------	0-4	52-100	0-30	5-15	1.30-1.60	14.00-42.00	0.10-0.13	1.0-2.9	0.0-0.5	.15	.15	5	3	86
	4-34	45-80	0-30	18-35	1.45-1.75	4.00-14.00	0.12-0.16	1.0-2.9	0.0-0.5	.24	.24			
	34-80	45-80	0-30	18-35	1.45-1.75	1.40-14.00	0.11-0.16	1.0-2.9	0.0-0.5	.24	.24			
NnA:														
Noboco---------------	0-13	70-91	0-30	2-8	1.55-1.80	42.00-141.00	0.08-0.10	0.0-2.9	0.0-1.0	.10	.10	5	2	134
	13-34	45-80	0-30	18-35	1.45-1.75	4.00-14.00	0.12-0.16	0.0-2.9	0.0-0.5	.24	.24			
	34-80	45-85	0-30	18-35	1.45-1.75	1.40-14.00	0.11-0.16	0.0-2.9	0.0-0.5	.24	.24			
Goldsboro------------	0-8	53-85	0-30	5-20	1.40-1.60	14.00-42.00	0.10-0.15	0.0-2.9	0.5-2.0	.20	.20	5	3	86
	8-35	45-80	0-30	18-30	1.30-1.50	4.00-42.00	0.10-0.16	0.0-2.9	0.0-0.2	.24	.24			
	35-80	35-80	0-30	20-34	1.30-1.40	4.00-14.00	0.10-0.16	0.0-2.9	0.0-0.2	.24	.24			
NoA:														
Norfolk--------------	0-7	70-91	0-30	0-15	1.45-1.55	42.00-141.00	0.08-0.10	0.0-2.9	0.2-2.0	.17	.17	5	2	134
	7-15	70-91	0-30	0-15	1.45-1.60	42.00-141.00	0.08-0.10	0.0-2.9	0.2-2.0	.10	.10			
	15-80	40-100	0-30	18-35	1.30-1.50	4.00-14.00	0.10-0.16	0.0-2.9	0.0-0.5	.24	.24			
NoB:														
Norfolk--------------	0-7	70-91	0-30	5-18	1.45-1.65	14.00-42.00	0.08-0.10	0.0-2.9	0.2-2.0	.17	.17	5	2	134
	7-15	70-91	0-30	5-18	1.45-1.65	14.00-42.00	0.08-0.10	0.0-2.9	0.0-1.0	.10	.10			
	15-80	40-100	0-30	18-35	1.30-1.65	4.00-14.00	0.10-0.16	0.0-2.9	0.0-1.0	.24	.24			
OkA:														
Okeetee--------------	0-8	52-100	20-35	0-20	1.20-1.50	14.00-42.00	0.10-0.16	0.0-2.9	0.5-0.8	.24	.24	5	3	86
	8-17	0-45	20-39	35-60	1.30-1.50	0.42-1.40	0.09-0.12	3.0-5.9	0.0-0.5	.32	.32			
	17-63	20-45	20-39	25-60	1.40-1.60	0.42-4.00	0.09-0.13	3.0-5.9	0.0-0.5	.24	.24			
	63-80	52-100	0-30	0-20	1.40-1.60	14.00-141.00	0.03-0.16	3.0-5.9	0.0-0.5	.24	.24			
OrA:														
Orangeburg-----------	0-10	70-91	0-30	0-15	1.45-1.55	42.00-141.00	0.08-0.10	0.0-2.9	0.2-1.5	.10	.10	5	2	134
	10-19	42-80	0-30	18-35	1.60-1.75	4.00-42.00	0.01-0.16	0.0-2.9	0.0-1.0	.24	.24			
	19-80	35-75	0-30	20-55	1.60-1.75	1.40-14.00	0.09-0.16	0.0-2.9	0.0-1.0	.24	.24			

Physical Soil Properties—Continued

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensi-bility	Organic matter	Erosion factors Kw	Kf	T	Wind erodi-bility group	Wind erodi-bility index
	In	Pct	Pct	Pct	g/cc	um/sec	In/in	Pct	Pct					
OrB:														
Orangeburg-----------	0-10	70-91	0-30	4-10	1.35-1.55	42.00-141.00	0.08-0.10	0.0-2.9	0.5-1.0	.10	.10	5	2	134
	10-19	20-80	0-30	15-35	1.60-1.75	4.00-42.00	0.10-0.16	0.0-2.9	0.0-0.5	.24	.24			
	19-80	40-100	0-30	20-55	1.60-1.75	1.40-14.00	0.09-0.16	0.0-2.9	0.0-0.5	.24	.24			
OsB2:														
Orangeburg-----------	0-5	52-100	0-30	4-20	1.35-1.55	14.00-42.00	0.10-0.13	0.0-2.9	0.2-1.0	.20	.20	5	3	86
	5-19	20-80	0-30	20-35	1.60-1.75	4.00-14.00	0.10-0.16	0.0-2.9	0.0-0.5	.24	.24			
	19-80	40-100	0-30	20-45	1.60-1.75	1.40-14.00	0.09-0.16	0.0-2.9	0.0-0.5	.24	.24			
PaA:														
Paxville-------------	0-13	52-100	0-30	0-20	1.30-1.40	14.00-42.00	0.08-0.13	0.0-2.9	0.2-2.0	.20	.20	5	3	86
	13-48	20-80	0-35	20-35	1.20-1.50	4.00-14.00	0.10-0.16	0.0-2.9	0.0-1.0	.15	.15			
	48-80	52-100	0-30	0-15	1.30-1.50	42.00-141.00	0.04-0.10	0.0-2.9	0.0-0.5	.10	.10			
PeA, PeB:														
Pelion---------------	0-8	52-100	0-30	2-10	1.35-1.75	42.00-141.00	0.04-0.16	0.0-2.9	0.5-0.8	.15	.15	3	2	134
	8-24	20-80	0-30	18-35	1.40-1.60	4.00-14.00	0.10-0.16	0.0-2.9	0.0-0.5	.17	.17			
	24-47	20-80	0-30	18-50	1.40-1.75	1.40-4.00	0.09-0.16	0.0-2.9	0.0-0.5	.20	.20			
	47-52	20-80	0-30	18-50	1.40-1.75	1.40-4.00	0.09-0.16	0.0-2.9	0.0-0.5	.20	.20			
	52-80	10-100	0-70	0-35	1.40-1.60	1.40-141.00	0.06-0.14	0.0-2.9	0.0-0.5	.15	.15			
PtD:														
Pits-----------------	---	---	---	---	---	---	---	---	---	---	---	--	---	---
Udorthents-----------	---	---	---	---	---	---	---	---	---	---	---	5	5	56
RaA:														
Rains----------------	0-7	53-85	0-30	5-20	1.30-1.60	14.00-42.00	0.10-0.13	0.0-2.9	1.0-6.0	.20	.20	5	3	86
	7-12	53-85	0-30	5-20	1.30-1.60	14.00-42.00	0.10-0.16	0.0-2.9	0.5-1.0	.24	.24			
	12-20	20-85	0-30	18-35	1.30-1.50	4.00-42.00	0.10-0.16	0.0-2.9	0.5-1.0	.28	.28			
	20-80	20-85	0-30	18-40	1.30-1.50	1.40-14.00	0.10-0.16	0.0-2.9	0.5-1.0	.28	.28			

Physical Soil Properties—Continued

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensi-bility	Organic matter	Erosion factors Kw	Kf	T	Wind erodi-bility group	Wind erodi-bility index
	In	Pct	Pct	Pct	g/cc	um/sec	In/in	Pct	Pct					
SmA:														
Smithboro------------	0-3	53-85	0-30	10-20	1.20-1.40	14.00-42.00	0.10-0.16	0.0-2.9	0.5-3.0	.24	.24	5	3	86
	3-5	53-85	0-30	10-20	1.20-1.40	14.00-42.00	0.10-0.16	0.0-2.9	0.0-0.5	.37	.37			
	5-12	10-45	30-53	30-60	1.20-1.50	0.42-4.00	0.10-0.15	3.0-5.9	0.0-0.5	.20	.20			
	12-21	10-45	25-53	40-70	1.20-1.50	0.42-1.40	0.12-0.15	3.0-5.9	0.0-0.5	.20	.20			
	21-80	---	25-53	40-70	1.20-1.50	0.42-1.40	0.12-0.15	3.0-5.9	0.0-0.5	.20	.20			
StA:														
State----------------	0-8	43-90	0-30	0-20	1.40-1.50	14.00-141.00	0.06-0.13	0.0-2.9	0.2-1.0	.24	.15	4	2	134
	8-14	43-90	0-30	0-20	1.40-1.50	14.00-141.00	0.06-0.13	0.0-2.9	0.2-0.5	.24	.15			
	14-49	43-85	0-30	10-35	1.40-1.50	4.00-42.00	0.10-0.16	0.0-2.9	0.2-0.5	.24	.24			
	49-55	52-100	0-35	0-20	1.40-1.50	14.00-42.00	0.08-0.13	0.0-2.9	0.0-0.5	.24	.24			
	55-80	70-100	0-30	0-15	1.40-1.50	42.00-141.00	0.03-0.05	0.0-2.9	0.0-0.5	.17	.17			
Eunola---------------	0-7	43-90	0-30	0-20	1.35-1.65	14.00-141.00	0.08-0.13	0.0-2.9	0.2-0.8	.20	.20	5	3	86
	7-10	43-90	0-30	0-20	1.35-1.65	14.00-141.00	0.08-0.13	0.0-2.9	0.2-0.5	.20	.20			
	10-38	35-80	0-30	18-35	1.35-1.65	1.40-14.00	0.10-0.16	0.0-2.9	0.2-0.5	.28	.28			
	38-55	35-80	0-30	8-35	1.35-1.65	1.40-14.00	0.10-0.16	0.0-2.9	0.0-0.5	.24	.24			
	55-80	43-100	0-30	0-18	1.20-1.35	14.00-141.00	0.04-0.13	0.0-2.9	0.0-0.5	.17	.17			
ThA:														
Thursa---------------	0-10	52-100	0-30	0-20	1.35-1.55	14.00-141.00	0.04-0.13	0.0-2.9	0.5-0.8	.10	.10	5	2	134
	10-35	30-80	0-30	20-35	1.60-1.75	4.00-14.00	0.10-0.16	0.0-2.9	0.0-0.5	.24	.24			
	35-50	20-85	0-30	20-60	1.60-1.75	4.00-14.00	0.09-0.16	0.0-2.9	0.0-0.5	.24	.24			
	50-80	20-85	0-30	20-60	1.60-1.75	4.00-14.00	0.09-0.16	0.0-2.9	0.0-0.5	.37	.37			
ThB:														
Thursa---------------	0-8	52-100	0-30	0-10	1.35-1.55	14.00-141.00	0.04-0.13	0.0-2.9	0.2-0.8	.10	.10	5	2	134
	8-34	30-80	0-30	20-35	1.60-1.75	4.00-14.00	0.10-0.16	0.0-2.9	0.2-0.5	.24	.24			
	34-40	20-85	0-30	20-60	1.60-1.75	1.40-14.00	0.09-0.16	0.0-2.9	0.0-0.5	.24	.24			
	40-80	20-85	0-30	20-60	1.60-1.75	1.40-14.00	0.09-0.16	0.0-2.9	0.0-0.5	.37	.37			
TrB, TrC:														
Troup----------------	0-3	85-100	0-15	1-10	1.30-1.70	42.00-141.00	0.05-0.10	0.0-2.9	0.5-1.0	.10	.10	5	1	220
	3-46	85-100	0-15	1-10	1.30-1.70	42.00-141.00	0.05-0.10	0.0-2.9	0.2-0.5	.10	.10			
	46-80	52-85	0-28	15-35	1.40-1.60	4.00-42.00	0.10-0.16	0.0-2.9	0.0-0.5	.20	.20			

Physical Soil Properties—Continued

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensi-bility	Organic matter	Erosion factors Kw	Kf	T	Wind erodi-bility group	Wind erodi-bility index
	In	Pct	Pct	Pct	g/cc	um/sec	In/in	Pct	Pct					
UdD:														
Udorthents, refuse substratum----------	---	---	---	---	---	---	---	---	---	---	---	5	5	56
Pits-----------------	---	---	---	---	---	---	---	---	---	---	---	5	5	56
VaC:														
Vaucluse-------------	0-2	70-100	0-28	2-10	1.35-1.75	42.00-141.00	0.04-0.10	0.0-0.9	0.2-1.0	.15	.15	3	2	134
	2-6	70-100	0-28	2-10	1.35-1.75	42.00-141.00	0.04-0.10	0.0-0.9	0.2-0.5	.15	.15			
	6-16	52-85	0-28	18-35	1.35-1.75	4.00-42.00	0.12-0.16	1.0-2.9	0.0-0.5	.24	.24			
	16-25	52-85	0-28	18-45	1.75-1.95	0.01-4.00	0.12-0.16	1.0-2.9	0.0-0.5	.24	.24			
	25-50	52-85	0-28	5-30	1.55-1.90	4.00-42.00	0.12-0.16	1.0-2.9	0.0-0.5	.17	.17			
	50-80	13-90	0-50	5-30	1.55-1.90	4.00-42.00	0.08-0.15	1.0-2.9	0.0-0.5	.17	.17			
WaB:														
Wagram---------------	0-4	85-100	0-28	1-7	1.60-1.75	42.00-141.00	0.03-0.05	0.0-0.9	0.2-0.8	.10	.10	5	1	220
	4-33	85-100	0-28	1-7	1.60-1.75	42.00-141.00	0.03-0.05	0.0-0.9	0.0-0.5	.10	.10			
	33-80	52-80	0-28	10-35	1.35-1.60	4.00-14.00	0.12-0.16	0.0-2.9	0.0-0.5	.20	.20			

Chemical Soil Properties

(Absence of an entry indicates that data were not estimated.)

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction
	Inches	meq/100 g	meq/100 g	pH
AaB:				
Ailey----------------	0-8	0.9-3.8	0.7-2.8	4.5-6.5
	8-22	0.2-2.4	0.2-1.8	4.5-6.5
	22-31	0.7-4.4	0.5-3.3	4.5-5.5
	31-42	2.2-4.4	1.7-3.3	4.5-5.5
	42-65	1.7-3.9	1.3-2.9	4.5-5.5
	65-80	0.7-4.9	0.5-3.7	4.5-5.5
Barnwell-------------	0-7	0.5-3.2	0.3-2.4	4.5-6.0
	7-10	0.0-2.6	0.0-2.0	3.5-5.5
	10-36	0.5-4.6	0.4-3.5	3.5-5.5
	36-50	2.0-7.0	1.5-5.3	3.5-5.5
	50-56	0.0-7.0	0.0-5.3	3.5-5.5
	56-80	0.0-7.0	0.0-5.3	3.5-5.5
AcC:				
Ailey----------------	0-8	0.1-3.2	0.1-2.4	4.5-6.5
	8-22	0.0-1.6	0.0-1.2	4.5-6.5
	22-31	0.5-3.6	0.4-2.7	4.5-5.5
	31-42	2.0-3.6	1.5-2.7	4.5-5.5
	42-65	0.5-4.1	0.4-3.1	4.5-5.5
	65-80	0.5-4.1	0.4-3.1	4.5-5.5
Troup----------------	0-3	1.2-3.2	0.9-2.4	4.5-6.0
	3-46	0.6-2.1	0.4-1.6	4.5-5.5
	46-80	1.5-4.6	1.1-3.5	4.5-5.5
Vaucluse-------------	0-2	0.8-3.2	0.6-5.0	3.5-6.5
	2-6	0.7-2.1	0.5-3.0	3.5-6.5
	6-16	1.8-4.6	1.4-3.5	3.5-5.5
	16-25	1.8-5.6	1.4-4.2	3.5-5.5
	25-50	0.5-4.1	0.4-3.1	3.5-5.5
	50-80	0.5-4.1	0.4-3.1	3.5-5.5
AeD:				
Ailey----------------	0-8	0.9-3.2	0.1-2.4	4.5-6.5
	8-22	0.0-1.6	0.0-1.2	4.5-6.5
	22-31	0.5-3.6	0.4-2.7	4.5-5.5
	31-42	2.0-3.6	1.5-2.7	4.5-5.5
	42-65	0.5-4.1	0.4-3.1	4.5-5.5
	65-80	0.5-4.1	0.4-3.1	4.5-5.5
Vaucluse-------------	0-2	0.8-3.2	0.6-5.0	3.5-6.5
	2-6	0.7-2.1	0.5-3.0	3.5-6.5
	6-16	1.8-4.6	1.4-3.5	3.5-5.5
	16-25	1.8-5.6	1.4-4.2	3.5-5.5
	25-50	0.5-4.1	0.4-3.1	3.5-5.5
	50-80	0.5-4.1	0.4-3.1	3.5-5.5
Troup----------------	0-3	1.2-3.2	0.9-2.4	4.5-6.0
	3-46	0.6-2.1	0.4-1.6	4.5-5.5
	46-80	1.5-4.6	1.1-3.5	4.5-5.5
AgB:				
Alaga----------------	0-7	1.2-7.8	0.9-5.8	3.6-6.0
	7-16	0.1-2.1	0.1-1.6	3.6-6.0
	16-36	0.1-2.1	0.1-1.6	3.6-6.0
	36-80	0.1-2.1	0.1-1.6	3.6-6.0

Chemical Soil Properties

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction
	Inches	meq/100 g	meq/100 g	pH
AoB:				
Alaga----------------	0-9	1.0-7.8	0.9-2.4	3.6-6.0
	9-63	0.1-2.1	0.2-1.7	3.6-6.0
	63-80	0.0-2.1	0.1-1.6	3.6-6.0
Lucknow--------------	0-8	0.7-2.4	0.4-1.8	3.5-6.0
	8-48	0.6-1.8	0.1-1.4	3.5-6.0
	48-80	1.7-4.6	1.2-3.5	3.5-5.5
ApB:				
Alpin----------------	0-10	0.3-2.8	0.2-2.1	4.5-6.5
	10-44	0.1-1.8	0.1-1.4	4.5-6.5
	44-80	0.1-1.9	0.1-1.4	4.5-6.5
ApD:				
Alpin----------------	0-10	0.3-2.8	0.2-2.1	4.5-6.5
	10-49	0.1-1.8	0.1-1.4	4.5-6.5
	49-80	0.5-1.9	0.4-1.4	4.5-6.5
AuB:				
Autryville-----------	0-11	0.6-2.7	0.4-2.0	4.5-6.5
	11-21	0.7-2.1	0.5-1.6	4.5-6.5
	21-31	1.5-3.6	1.1-2.7	4.5-6.0
	31-51	0.7-1.9	0.5-1.4	4.5-5.5
	51-80	1.5-4.6	1.1-3.5	4.5-5.5
BaB:				
Barnwell-------------	0-7	0.5-3.2	0.3-2.4	4.5-6.0
	7-11	0.0-2.6	0.0-2.0	3.5-5.5
	11-36	0.5-4.6	0.4-3.5	3.5-5.5
	36-50	2.0-7.0	1.5-5.3	3.5-5.5
	50-56	0.0-7.0	0.0-5.3	3.5-5.5
	56-80	0.0-7.0	0.0-5.3	3.5-5.5
BbB2:				
Barnwell-------------	0-6	0.5-3.7	0.4-2.8	4.5-6.0
	6-36	0.5-4.6	0.4-3.5	3.5-5.5
	36-50	2.0-7.0	1.5-5.3	3.5-5.5
	50-56	0.0-7.0	0.0-5.3	3.5-5.5
	56-80	0.0-7.0	0.0-5.3	3.5-5.5
BcC:				
Barnwell-------------	0-7	0.5-3.2	0.3-2.4	4.5-6.0
	7-10	0.0-2.6	0.0-2.0	3.5-5.5
	10-36	0.5-4.6	0.4-3.5	3.5-5.5
	36-50	2.0-7.0	1.5-5.3	3.5-5.5
	50-56	0.0-7.0	0.0-5.3	3.5-5.5
	56-80	0.0-7.0	0.0-5.3	3.5-5.5
Cowarts--------------	0-6	1.1-6.0	0.8-4.5	4.5-5.5
	6-29	0.5-4.6	0.4-3.5	4.5-5.5
	29-80	0.5-5.1	0.4-3.8	4.5-5.5
Troup----------------	0-3	1.2-3.2	0.9-2.4	4.5-6.0
	3-46	0.6-2.1	0.4-1.6	4.5-5.5
	46-80	1.5-4.6	1.1-3.5	4.5-5.5

Chemical Soil Properties—Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction
	Inches	meq/100 g	meq/100 g	pH
BoB:				
Bonneau	0-8	1.3-5.3	1.0-4.0	4.5-6.5
	8-24	1.3-5.3	1.0-4.0	4.5-6.0
	24-51	1.3-4.6	1.0-3.5	4.5-6.0
	51-80	1.5-5.1	1.1-3.8	4.5-6.0
BuA:				
Butters	0-9	0.5-5.5	0.4-4.1	4.5-6.5
	9-12	0.4-2.3	0.3-1.7	4.5-6.0
	12-30	1.0-3.1	0.8-2.3	4.5-5.5
	30-49	0.1-2.1	0.1-1.6	4.5-5.5
	49-80	1.0-3.6	0.8-2.7	4.5-5.5
CaB:				
Candor	0-8	0.7-2.1	0.5-1.6	3.5-6.0
	8-25	0.1-1.5	0.1-1.1	3.5-6.0
	25-36	0.6-2.3	0.4-1.7	3.5-5.5
	36-61	0.1-1.5	0.1-1.1	3.5-5.5
	61-80	1.0-4.6	0.8-3.5	3.5-5.5
CcA:				
Chastain	0-4	3.8-17	2.8-13	4.5-6.0
	4-56	5.0-13	3.7-9.6	4.5-6.0
	56-80	2.5-7.8	1.8-5.8	4.5-6.0
Chewacla	0-1	3.2-12	2.4-9.4	4.5-6.5
	1-38	3.5-10	2.6-7.7	4.5-6.5
	38-62	3.5-10	2.6-7.7	4.5-6.5
	62-80	3.0-9.8	2.3-7.3	4.5-6.5
ChA:				
Chewacla	0-1	3.2-12	2.4-9.4	4.5-6.5
	1-38	3.5-10	2.6-7.7	4.5-6.5
	38-62	3.5-10	2.6-7.7	4.5-6.5
	62-80	3.0-9.8	2.3-7.3	4.5-6.5
Chastain	0-4	3.8-17	2.8-13	4.5-6.0
	4-56	5.0-13	3.7-9.6	4.5-6.0
	56-80	2.5-7.8	1.8-5.8	4.5-6.0
CwD:				
Cowarts	0-6	1.1-6.0	0.8-4.5	4.5-5.5
	6-29	0.5-4.6	0.4-3.5	4.5-5.5
	29-80	0.5-5.1	0.4-3.8	4.5-5.5
CxA:				
Coxville	0-7	1.6-12	1.2-8.8	3.5-6.5
	7-80	3.5-10	2.6-7.9	3.5-5.5
DaA:				
Dorovan	0-10	2.7-7.0	1.0-4.7	3.5-5.5
	10-70	10-15	6.0-14	3.5-5.5
	70-80	0.0-4.2	0.0-3.2	4.5-5.5
DoA, DoB:				
Dothan	0-8	0.6-3.2	0.4-2.4	4.5-6.0
	8-37	0.5-4.6	0.4-3.5	4.5-6.0
	37-80	2.0-5.1	1.5-3.8	4.5-6.0

Chemical Soil Properties—Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction
	Inches	meq/100 g	meq/100 g	pH
DtB2:				
Dothan	0-4	0.5-2.6	0.4-2.0	4.5-6.0
	4-37	1.8-4.6	1.4-3.5	4.5-6.0
	37-80	1.8-5.1	1.4-3.8	4.5-6.0
EuA:				
Eunola	0-7	0.6-5.0	0.4-2.8	4.5-5.5
	7-10	0.5-3.1	0.3-2.3	4.5-5.5
	10-38	2.3-6.5	1.0-3.5	4.5-5.5
	38-55	0.8-15	0.6-3.5	4.5-5.5
	55-80	0.0-7.0	0.0-2.2	4.5-5.5
FaA:				
Faceville	0-7	0.7-2.7	0.1-2.0	3.5-6.0
	7-13	0.1-2.1	0.1-1.6	3.5-6.0
	13-80	3.0-6.6	2.0-5.0	3.5-5.5
FaB:				
Faceville	0-7	0.7-2.7	0.5-2.0	3.5-6.0
	7-13	0.2-2.1	0.2-1.6	3.5-6.0
	13-80	3.0-6.6	2.0-5.0	3.5-5.5
FbB2:				
Faceville	0-2	0.5-3.7	0.3-2.8	3.5-6.0
	2-80	3.0-6.6	2.0-5.0	3.5-5.5
FoB:				
Foxworth	0-4	0.6-2.5	0.4-1.9	4.5-6.0
	4-80	0.1-1.9	0.1-1.4	4.5-6.0
FuB:				
Fuquay	0-8	0.6-2.4	0.4-1.8	3.5-6.0
	8-27	0.1-1.8	0.1-1.4	3.5-6.0
	27-42	1.0-4.6	0.8-3.5	3.5-6.0
	42-80	1.5-4.6	0.5-3.5	3.5-6.0
GoA:				
Goldsboro	0-8	1.6-6.0	1.2-4.5	3.5-6.0
	8-35	1.8-3.5	1.4-2.6	3.5-5.5
	35-80	2.0-3.9	1.5-2.9	3.5-5.5
JhA:				
Johns	0-7	0.5-3.2	0.3-3.0	4.5-6.5
	7-15	0.0-2.6	0.0-2.0	4.5-6.5
	15-36	1.8-4.6	1.4-3.5	4.5-6.0
	36-80	0.0-2.6	0.0-2.0	4.5-6.0
JoA:				
Johnston	0-5	2.2-24	1.7-18	3.5-6.0
	5-31	2.2-24	1.7-18	3.5-6.0
	31-80	0.8-5.8	0.6-4.3	3.5-6.0
JzA:				
Johnston	0-5	2.2-24	1.7-18	3.5-6.0
	5-31	2.2-24	1.7-18	3.5-6.0
	31-80	0.8-5.8	0.6-4.3	3.5-6.0

Chemical Soil Properties—Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction
	Inches	meq/100 g	meq/100 g	pH
Mouzon----------------	0-8	1.6-6.3	1.2-4.7	4.5-6.5
	8-31	2.3-6.2	1.7-4.7	5.1-8.4
	31-46	1.2-5.8	0.3-4.3	6.1-8.4
	46-80	0.0-4.0	0.0-3.0	6.1-8.4
KaA:				
Kalmia----------------	0-6	0.5-2.9	0.3-3.0	4.5-6.0
	6-23	1.8-4.6	1.4-3.5	4.5-6.0
	23-27	0.0-3.1	0.0-2.3	4.5-6.0
	27-80	0.0-2.1	0.0-1.6	4.5-6.0
LaB:				
Lakeland--------------	0-5	0.2-3.0	0.2-2.3	4.5-6.0
	5-30	0.1-1.7	0.1-1.3	4.5-6.0
	30-80	0.1-1.7	0.1-1.3	4.5-6.0
LaD:				
Lakeland--------------	0-5	1.3-3.0	1.0-2.3	4.5-6.0
	5-80	0.1-1.7	0.1-1.3	4.5-6.0
LbB:				
Lucknow---------------	0-8	0.7-2.4	0.4-1.8	3.5-6.0
	8-48	0.6-1.8	0.1-1.4	3.5-6.0
	48-80	1.7-4.6	1.2-3.5	3.5-5.5
LcB:				
Lucy------------------	0-7	1.2-3.2	0.9-2.4	4.5-6.0
	7-22	0.7-3.2	0.5-2.4	4.5-6.0
	22-80	1.0-5.2	0.8-3.9	4.5-5.5
LuA:				
Lumbee----------------	0-8	4.9-11	3.7-8.1	4.5-6.0
	8-28	2.9-5.8	2.2-4.3	4.5-5.5
	28-80	0.0-1.5	0.0-1.1	4.5-5.5
LyA:				
Lynchburg-------------	0-7	1.6-13	1.2-9.9	3.5-5.5
	7-14	1.8-4.6	1.4-3.5	3.5-5.5
	14-80	1.8-4.6	1.4-3.5	3.5-5.5
MaA:				
Marvyn----------------	0-6	1.3-3.2	1.0-2.4	4.5-6.0
	6-47	1.8-5.6	1.4-4.2	4.5-5.5
	47-80	0.5-4.1	0.4-3.1	4.5-5.5
MaB:				
Marvyn----------------	0-2	1.3-3.2	1.6-2.4	4.5-6.0
	2-47	1.8-5.6	2.8-4.2	4.5-5.5
	47-80	0.5-4.1	1.7-3.1	4.5-5.5
MeA:				
Meggett---------------	0-5	0.5-4.2	0.3-3.2	5.1-6.5
	5-51	2.0-7.1	1.5-5.3	5.1-6.0
	51-80	0.0-3.1	0.0-2.3	5.1-6.0
MyA:				
Myatt-----------------	0-7	1.0-11	0.7-5.0	3.5-6.5
	7-13	0.5-4.0	0.4-2.5	3.5-5.5
	13-50	1.8-7.5	1.4-5.0	3.5-5.5
	50-80	0.0-3.1	0.0-2.3	3.5-5.5

Chemical Soil Properties—Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction
	Inches	meq/100 g	meq/100 g	pH
Paxville-------------	0-13	0.6-12	0.4-4.9	3.5-6.5
	13-48	2.0-7.0	1.5-5.5	3.5-5.5
	48-80	0.0-3.0	0.0-2.5	3.5-5.5
NaB2:				
Nankin---------------	0-6	0.7-4.2	0.5-3.1	4.5-6.0
	6-51	2.0-6.8	2.6-5.1	4.5-6.0
	51-80	1.8-6.6	1.0-5.0	4.5-5.5
NbC:				
Nankin---------------	0-12	0.0-5.5	0.0-6.0	4.5-6.0
	12-49	3.5-7.1	2.6-5.3	4.5-6.0
	49-80	1.8-6.6	1.4-5.0	4.5-5.5
Lucy-----------------	0-7	1.2-3.2	0.9-2.4	4.5-6.0
	7-22	0.7-3.2	0.5-2.4	4.5-6.0
	22-80	1.0-5.2	0.8-3.9	4.5-5.5
NbD:				
Nankin---------------	0-12	0.6-5.5	0.4-6.0	4.5-6.0
	12-49	3.5-7.1	2.6-5.3	4.5-6.0
	49-80	1.8-6.6	1.4-5.0	4.5-5.5
Lucy-----------------	0-7	1.2-3.2	0.9-2.4	4.5-6.0
	7-22	0.7-3.2	0.5-2.4	4.5-6.0
	22-80	1.0-5.2	0.8-3.9	4.5-5.5
NeB:				
Noboco---------------	0-13	0.8-3.0	0.6-3.0	3.5-6.0
	13-34	1.8-6.5	1.4-3.5	3.5-5.5
	34-80	1.8-4.6	1.0-3.5	3.5-5.5
NmB2:				
Noboco---------------	0-4	0.5-2.6	0.4-2.0	3.5-6.0
	4-34	1.8-6.5	1.4-3.5	3.5-5.5
	34-80	1.8-4.6	1.0-3.5	3.5-5.5
NnA:				
Noboco---------------	0-13	0.2-3.0	0.2-3.0	3.5-6.0
	13-34	1.8-6.5	1.4-3.5	3.5-5.5
	34-80	1.8-4.6	1.0-3.5	3.5-5.5
Goldsboro------------	0-8	1.6-6.0	1.2-4.5	3.5-6.0
	8-35	1.8-3.5	1.4-2.6	3.5-5.5
	35-80	2.0-3.9	1.5-2.9	3.5-5.5
NoA:				
Norfolk--------------	0-7	0.6-6.0	0.4-4.5	4.5-6.5
	7-15	0.5-6.0	0.4-4.5	4.5-6.0
	15-80	0.5-5.1	0.4-3.8	4.5-5.5
NoB:				
Norfolk--------------	0-7	1.1-6.3	0.8-4.7	4.5-6.5
	7-15	0.5-4.0	0.4-3.0	4.5-6.0
	15-80	1.8-5.8	1.4-4.3	4.5-5.5

Chemical Soil Properties—Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction
	Inches	meq/100 g	meq/100 g	pH
OkA:				
Okeetee	0-8	10-20	0.8-4.0	3.5-6.0
	8-17	10-25	2.6-7.5	4.5-6.0
	17-63	10-21	1.9-8.5	4.5-6.0
	63-80	2.0-21	0.0-3.5	5.6-6.0
OrA:				
Orangeburg	0-10	0.6-4.9	0.4-3.7	4.5-6.0
	10-19	1.5-6.8	1.1-5.1	4.5-5.5
	19-80	2.0-7.8	1.5-5.8	4.5-5.5
OrB:				
Orangeburg	0-10	1.5-3.2	0.5-2.4	4.5-6.0
	10-19	1.5-5.6	1.1-4.2	4.5-5.5
	19-80	2.0-6.6	1.5-5.0	4.5-5.5
OsB2:				
Orangeburg	0-5	1.0-4.2	0.7-3.2	4.5-6.0
	5-19	2.0-5.6	1.5-4.2	4.5-5.5
	19-80	2.0-5.6	1.5-4.9	4.5-5.5
PaA:				
Paxville	0-13	0.6-12	0.4-4.9	3.5-6.5
	13-48	2.0-7.0	1.5-5.5	3.5-5.5
	48-80	0.0-3.0	0.0-2.5	3.5-5.5
PeA, PeB:				
Pelion	0-8	1.3-2.7	1.0-2.0	3.5-6.5
	8-24	1.8-6.5	1.4-3.5	3.5-5.5
	24-47	1.5-6.1	1.4-4.6	3.5-5.5
	47-52	1.5-6.1	1.4-4.6	3.5-5.5
	52-80	0.0-3.1	0.0-2.3	3.5-5.5
PtD:				
Pits	---	---	---	---
Udorthents	---	---	---	---
RaA:				
Rains	0-7	2.8-16	2.1-12	4.5-6.5
	7-12	1.6-4.2	1.2-3.2	4.5-5.5
	12-20	2.9-6.2	2.2-4.7	4.5-5.5
	20-80	2.9-6.2	2.2-4.7	4.5-5.5
SmA:				
Smithboro	0-3	2.1-8.8	1.6-6.6	4.5-6.0
	3-5	1.0-3.1	0.8-2.3	4.5-6.0
	5-12	3.0-8.1	2.2-6.1	4.5-5.5
	12-21	4.0-8.1	3.0-6.1	4.5-5.5
	21-80	4.0-8.1	3.0-6.1	4.5-5.5
StA:				
State	0-8	0.5-4.2	0.3-3.2	4.5-6.0
	8-14	0.5-4.2	0.3-3.2	4.5-6.0
	14-49	1.5-4.6	1.1-3.5	4.5-6.0
	49-55	0.0-3.5	0.0-2.3	4.5-6.0
	55-80	0.0-2.6	0.0-2.0	4.5-6.0

Chemical Soil Properties—Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction
	Inches	meq/100 g	meq/100 g	pH
Eunola	0-7	0.6-5.0	0.4-2.8	4.5-5.5
	7-10	0.5-3.1	0.3-2.3	4.5-5.5
	10-38	2.3-6.5	1.0-3.5	4.5-5.5
	38-55	0.8-15	0.6-3.5	4.5-5.5
	55-80	0.0-7.0	0.0-2.2	4.5-5.5
ThA:				
Thursa	0-10	0.5-3.7	0.5-2.8	3.5-6.0
	10-35	2.0-4.6	1.5-3.5	3.5-6.0
	35-50	2.0-7.1	1.5-5.3	3.5-6.0
	50-80	2.0-7.1	1.5-5.3	3.5-6.0
ThB:				
Thursa	0-8	0.5-2.7	0.5-2.0	3.5-6.0
	8-34	2.0-4.6	2.0-3.5	3.5-6.0
	34-40	2.0-7.1	2.0-5.3	3.5-6.0
	40-80	2.0-7.1	2.0-5.3	3.5-6.0
TrB, TrC:				
Troup	0-3	1.2-3.2	0.9-2.4	4.5-6.0
	3-46	0.6-2.1	0.4-1.6	4.5-5.5
	46-80	1.5-4.6	1.1-3.5	4.5-5.5
UdD:				
Udorthents, refuse substratum	---	---	---	---
Pits	---	---	---	---
VaC:				
Vaucluse	0-2	0.8-3.2	0.6-5.0	3.5-6.5
	2-6	0.7-2.1	0.5-3.0	3.5-6.5
	6-16	1.8-4.6	1.4-3.5	3.5-5.5
	16-25	1.8-5.6	1.4-4.2	3.5-5.5
	25-50	0.5-4.1	0.4-3.1	3.5-5.5
	50-80	0.5-4.1	0.4-3.1	3.5-5.5
WaB:				
Wagram	0-4	0.6-2.4	0.4-1.8	4.5-6.0
	4-33	0.1-1.8	0.1-1.4	4.5-6.0
	33-80	1.0-4.6	0.8-3.5	4.5-6.0

Water Features

(Depths of layers are in feet. See text for definitions of terms used in this table. Estimates of the frequency of ponding and flooding apply to the whole year rather than to individual months. Absence of an entry indicates that the feature is not a concern or that data were not estimated.)

Map symbol and soil name	Hydro-logic group	Surface runoff	Month	Water table: Upper limit	Water table: Lower limit	Ponding: Surface water depth	Ponding: Duration	Ponding: Frequency	Flooding: Duration	Flooding: Frequency
				Ft	Ft	Ft				
AaB:										
Ailey	B	Low								
			Jan-Dec	---	---	---	---	None	---	None
Barnwell	C	Low								
			Jan	3.3-4.7	3.8-5.1	---	---	None	---	None
			Feb-Mar	3.3-4.7	3.8-4.6	---	---	None	---	None
			Apr-Nov	---	---	---	---	None	---	None
			Dec	3.3-4.7	3.8-4.6	---	---	None	---	None
AcC:										
Ailey	B	Medium								
			Jan-Dec	---	---	---	---	None	---	None
Troup	A	Low								
			Jan-Dec	---	---	---	---	None	---	None
Vaucluse	C	Medium								
			Jan-Dec	---	---	---	---	None	---	None
AeD:										
Ailey	B	Medium								
			Jan-Dec	---	---	---	---	None	---	None
Vaucluse	C	Medium								
			Jan-Dec	---	---	---	---	None	---	None
Troup	A	Low								
			Jan-Dec	---	---	---	---	None	---	None
AgB:										
Alaga	A	Very low								
			Nov-Apr	4.7-6.3	>6.0	---	---	None	---	None
			May-Oct	---	---	---	---	None	---	None
AoB:										
Alaga	A	Very low								
			Nov-Apr	3.4-6.3	>6.0	---	---	None	Very brief	Rare
			May-Oct	---	---	---	---	None	Very brief	Rare
Lucknow	A	Very low								
			Nov-Apr	3.3-5.9	>6.0	---	---	None	Very brief	Rare
			May-Oct	---	---	---	---	None	Very brief	Rare

Water Features—Continued

Map symbol and soil name	Hydro-logic group	Surface runoff	Month	Water table: Upper limit	Water table: Lower limit	Ponding: Surface water depth	Ponding: Duration	Ponding: Frequency	Flooding: Duration	Flooding: Frequency
				Ft	Ft	Ft				
ApB:										
Alpin----------------------	A	Very low								
			Jan-Dec	---	---	---	---	None	---	None
ApD:										
Alpin----------------------	A	Low								
			Jan-Dec	---	---	---	---	None	---	None
AuB:										
Autryville-----------------	A	Very low								
			Dec-Apr	3.7-6.3	>6.0	---	---	None	---	None
			May-Nov	---	---	---	---	None	---	None
BaB:										
Barnwell-------------------	C	Low								
			January	3.3-4.7	3.8-5.1	---	---	None	---	None
			February	3.3-4.7	3.8-4.6	---	---	None	---	None
			March	3.3-4.7	3.8-4.6	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	3.3-4.7	3.8-4.6	---	---	None	---	None
BbB2:										
Barnwell-------------------	C	Low								
			Jan	3.3-4.7	3.8-5.1	---	---	None	---	None
			Feb-Mar	3.3-4.7	3.8-4.6	---	---	None	---	None
			Apr-Nov	---	---	---	---	None	---	None
			Dec	3.3-4.7	3.8-4.6	---	---	None	---	None
BcC:										
Barnwell-------------------	C	Medium								
			Dec-Mar	3.3-4.7	3.8-4.6	---	---	None	---	None
			Apr-Nov	---	---	---	---	None	---	None
Cowarts--------------------	C	Medium								
			Jan-Dec	---	---	---	---	None	---	None
Troup----------------------	A	Low								
			Jan-Dec	---	---	---	---	None	---	None

Water Features—Continued

Map symbol and soil name	Hydro-logic group	Surface runoff	Month	Water table: Upper limit	Water table: Lower limit	Ponding: Surface water depth	Ponding: Duration	Ponding: Frequency	Flooding: Duration	Flooding: Frequency
				Ft	Ft	Ft				
BoB:										
Bonneau-------------------	A	Low								
			Nov-Apr	3.3-4.8	>6.0	---	---	None	---	None
			May-Oct	---	---	---	---	None	---	None
BuA:										
Butters-------------------	B	Very low								
			Nov-Apr	3.7-5.8	>6.0	---	---	None	---	None
			May-Oct	---	---	---	---	None	---	None
CaB:										
Candor--------------------	A	Very low								
			Jan-Dec	---	---	---	---	None	---	None
CcA:										
Chastain------------------	D	Very high								
			Dec-Mar	0.0	>6.0	---	---	None	Long	Frequent
			Apr-Nov	0.3-1.7	>6.0	---	---	None	Brief	Frequent
Chewacla------------------	C	Low								
			Nov-Apr	0.5-2.0	>6.0	---	---	None	Brief	Frequent
			May-Oct	---	---	---	---	None	Brief	Frequent
ChA:										
Chewacla------------------	C	Low								
			Nov-Apr	0.5-2.0	>6.0	---	---	None	Brief	Frequent
			May-Oct	---	---	---	---	None	Brief	Frequent
Chastain------------------	D	Very high								
			Dec-Mar	0.0	>6.0	---	---	None	Long	Frequent
			Apr-Nov	0.3-1.7	>6.0	---	---	None	Brief	Frequent
CwD:										
Cowarts-------------------	C	Medium								
			Jan-Dec	---	---	---	---	None	---	None
CxA:										
Coxville------------------	D	Low								
			Dec-Mar	0.3-0.8	>6.0	---	---	None	---	None
			Apr-Nov	---	---	---	---	None	---	None
DaA:										
Dorovan-------------------	D	Very high								
			Nov-Jun	0.0	>6.0	---	---	None	Very long	Frequent
			Jul-Oct	0.0	>6.0	---	---	None	Brief	Frequent

Water Features—Continued

Map symbol and soil name	Hydro-logic group	Surface runoff	Month	Water table: Upper limit	Water table: Lower limit	Ponding: Surface water depth	Ponding: Duration	Ponding: Frequency	Flooding: Duration	Flooding: Frequency
				Ft	Ft	Ft				
DoA:										
Dothan	B	Low								
			Dec-Mar	3.3-4.9	5.0-6.0	---	---	None	---	None
			Apr-Nov	---	---	---	---	None	---	None
DoB:										
Dothan	B	Low								
			Dec-Mar	3.3-5.5	5.0-6.0	---	---	None	---	None
			Apr-Nov	---	---	---	---	None	---	None
DtB2:										
Dothan	B	Low								
			Dec-Mar	3.3-5.5	5.0-6.0	---	---	None	---	None
			Apr-Nov	---	---	---	---	None	---	None
EuA:										
Eunola	C	Low								
			Nov-Apr	0.9-2.8	>6.0	---	---	None	Very brief	Rare
			May-Oct	---	---	---	---	None	Very brief	Rare
FaA, FaB:										
Faceville	B	Low								
			Jan-Dec	---	---	---	---	None	---	None
FbB2:										
Faceville	B	Low								
			Jan-Dec	---	---	---	---	None	---	None
FoB:										
Foxworth	A	Very low								
			Dec-Apr	4.0-6.2	>6.0	---	---	None	---	None
			May-Nov	---	---	---	---	None	---	None
FuB:										
Fuquay	B	Low								
			Dec-Mar	3.3-4.7	>6.0	---	---	None	---	None
			Apr-Nov	---	---	---	---	None	---	None
GoA:										
Goldsboro	B	Low								
			Dec-Apr	1.3-2.5	>6.0	---	---	None	---	None
			May-Nov	---	---	---	---	None	---	None

Water Features—Continued

Map symbol and soil name	Hydro-logic group	Surface runoff	Month	Water table: Upper limit	Water table: Lower limit	Ponding: Surface water depth	Ponding: Duration	Ponding: Frequency	Flooding: Duration	Flooding: Frequency
				Ft	Ft	Ft				
JhA:										
Johns	C	Low								
			Dec-Apr	1.0-2.5	>6.0	---	---	None	Very brief	Rare
			May-Nov	---	---	---	---	None	Very brief	Rare
JoA:										
Johnston	D	Very high								
			Nov-Jul	0.0	>6.0	---	---	None	Long	Frequent
			Aug-Oct	0.0	>6.0	---	---	None	Brief	Frequent
JzA:										
Johnston	D	Very high								
			Nov-July	0.0	>6.0	---	---	None	Long	Frequent
			Aug-Oct	0.0	>6.0	---	---	None	Brief	Frequent
Mouzon	D	Very high								
			Dec-Apr	0.0	>6.0	---	---	None	Long	Frequent
			May-Oct	---	---	---	---	None	Brief	Frequent
			Nov	0.0	>6.0	---	---	None	Brief	Frequent
KaA:										
Kalmia	B	Low								
			Dec-Apr	3.3-5.2	>6.0	---	---	None	Very brief	Rare
			May-Nov	---	---	---	---	None	Very brief	Rare
LaB:										
Lakeland	A	Very low								
			Jan-Dec	---	---	---	---	None	---	None
LaD:										
Lakeland	A	Low								
			Jan-Dec	---	---	---	---	None	---	None
LbB:										
Lucknow	A	Very low								
			Nov-Apr	3.3-5.9	>6.0	---	---	None	---	None
			May-Oct	---	---	---	---	None	---	None
LcB:										
Lucy	A	Low								
			Jan-Dec	---	---	---	---	None	---	None
LuA:										
Lumbee	B/D	Low								
			Nov-Apr	0.0-0.7	>6.0	---	---	None	Very brief	Rare
			May-Oct	---	---	---	---	None	Very brief	Rare

Water Features—Continued

Map symbol and soil name	Hydro-logic group	Surface runoff	Month	Water table: Upper limit	Water table: Lower limit	Ponding: Surface water depth	Ponding: Duration	Ponding: Frequency	Flooding: Duration	Flooding: Frequency
				Ft	Ft	Ft				
LyA:										
Lynchburg	C	Low								
			Nov-Apr	0.5-1.7	>6.0	---	---	None	---	None
			May-Oct	---	---	---	---	None	---	None
MaA, MaB:										
Marvyn	B	Low								
			Jan-Dec	---	---	---	---	None	---	None
MeA:										
Meggett	D	High								
			Dec-Mar	0.0	>6.0	---	---	None	Brief	Occasional
			Apr-Nov	---	---	---	---	None	Brief	Occasional
MyA:										
Myatt	D	Low								
			Nov-Apr	0.3-1.4	>6.0	---	---	None	Brief	Occasional
			May-Oct	---	---	---	---	None	Brief	Occasional
Paxville	B/D	Low								
			Nov-Apr	0.0	>6.0	---	---	None	Brief	Occasional
			May-Oct	---	---	---	---	None	Brief	Occasional
NaB2:										
Nankin	C	Low								
			Jan-Dec	---	---	---	---	None	---	None
NbC, NbD:										
Nankin	C	Medium								
			Jan-Dec	---	---	---	---	None	---	None
Lucy	A	Low								
			Jan-Dec	---	---	---	---	None	---	None
NeB:										
Noboco	B	Low								
			Dec-Apr	2.8-3.5	>6.0	---	---	None	---	None
			May-Nov	---	---	---	---	None	---	None
NmB2:										
Noboco	B	Low								
			Dec-Apr	2.8-3.5	>6.0	---	---	None	---	None
			May-Nov	---	---	---	---	None	---	None

Water Features—Continued

Map symbol and soil name	Hydro- logic group	Surface runoff	Month	Water table		Ponding			Flooding	
				Upper limit	Lower limit	Surface water depth	Duration	Frequency	Duration	Frequency
				Ft	Ft	Ft				
NnA:										
Noboco---------------------	B	Low								
			Dec-Apr	2.6-3.6	>6.0	---	---	None	---	None
			May-Nov	---	---	---	---	None	---	None
Goldsboro------------------	B	Low								
			Dec-Apr	1.3-2.5	>6.0	---	---	None	---	None
			May-Nov	---	---	---	---	None	---	None
NoA, NoB:										
Norfolk--------------------	B	Low								
			Dec-Apr	4.0-5.7	>6.0	---	---	None	---	None
			May-Nov	---	---	---	---	None	---	None
OkA:										
Okeetee--------------------	D	High								
			Nov-Apr	0.4-1.6	>6.0	---	---	None	Very brief	Rare
			May-Oct	---	---	---	---	None	Very brief	Rare
OrA, OrB:										
Orangeburg-----------------	B	Low								
			Jan-Dec	---	---	---	---	None	---	None
OsB2:										
Orangeburg-----------------	B	Low								
			Jan-Dec	---	---	---	---	None	---	None
PaA:										
Paxville-------------------	B/D	Low								
			Nov-Apr	0.0	>6.0	---	---	None	Brief	Occasional
			May-Oct	---	---	---	---	None	Brief	Occasional
PeA:										
Pelion---------------------	B/D	Low								
			Dec-Mar	1.0-2.5	2.6-4.8	---	---	None	---	None
			Apr-Nov	---	---	---	---	None	---	None
PeB:										
Pelion---------------------	B/D	Low								
			Dec-Mar	1.6-2.5	2.8-4.8	---	---	None	---	None
			Apr-Nov	---	---	---	---	None	---	None

Water Features—Continued

Map symbol and soil name	Hydro-logic group	Surface runoff	Month	Water table: Upper limit	Water table: Lower limit	Ponding: Surface water depth	Ponding: Duration	Ponding: Frequency	Flooding: Duration	Flooding: Frequency
				Ft	Ft	Ft				
PtD:										
Pits	---	---								
			Jan-Dec	---	---	---	---	None	---	---
Udorthents	A	---								
			Jan-Dec	---	---	---	---	None	---	---
RaA:										
Rains	B/D	Low								
			Dec-Mar	0.3-1.3	>6.0	---	---	None	---	None
			Apr-Nov	---	---	---	---	None	---	None
SmA:										
Smithboro	D	High								
			Dec-Mar	0.5-0.9	>6.0	---	---	None	---	None
			Apr-Nov	---	---	---	---	None	---	None
StA:										
State	B	Low								
			Dec-Apr	3.3-4.2	>6.0	---	---	None	Very brief	Rare
			May-Nov	---	---	---	---	None	Very brief	Rare
Eunola	C	Low								
			Nov-Apr	0.9-2.8	>6.0	---	---	None	Very brief	Rare
			May-Oct	---	---	---	---	None	Very brief	Rare
ThA, ThB:										
Thursa	B	Low								
			Jan-Dec	---	---	---	---	None	---	None
TrB:										
Troup	A	Very low								
			Jan-Dec	---	---	---	---	None	---	None
TrC:										
Troup	A	Low								
			Jan-Dec	---	---	---	---	None	---	None
UdD:										
Udorthents, refuse substratum	C	---								
			Jan-Dec	---	---	---	---	None	---	---
Pits	A	---								
			Jan-Dec	---	---	---	---	None	---	---

Water Features—Continued

Map symbol and soil name	Hydro-logic group	Surface runoff	Month	Water table: Upper limit	Water table: Lower limit	Ponding: Surface water depth	Ponding: Duration	Ponding: Frequency	Flooding: Duration	Flooding: Frequency
				Ft	Ft	Ft				
VaC:										
Vaucluse------------------	C	Medium								
			Jan-Dec	---	---	---	---	None	---	None
WaB:										
Wagram--------------------	A	Low								
			Jan-Dec	---	---	---	---	None	---	None

Soil Features

(See text for definitions of terms used in this table. Absence of an entry indicates that the feature is not a concern or that data were not estimated.)

Map symbol and soil name	Restrictive layer				Subsidence		Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Thickness	Hardness	Initial	Total		Uncoated steel	Concrete
		In	In		In	In			
AaB:									
Ailey------------------	Cemented horizon	26-46	---	Very weakly cemented	0	---	None	Moderate	Moderate
Barnwell---------------	---	---	---	---	0	---	None	Moderate	High
AcC:									
Ailey------------------	Cemented horizon	27-52	---	Very weakly cemented	0	---	None	Moderate	Moderate
Troup------------------	---	---	---	---	0	---	None	Low	Moderate
Vaucluse---------------	Cemented horizon	15-45	---	Very weakly cemented	0	---	None	Low	High
AeD:									
Ailey------------------	Cemented horizon	27-52	---	Very weakly cemented	0	---	None	Moderate	Moderate
Vaucluse---------------	Cemented horizon	15-45	---	Very weakly cemented	0	---	None	Low	High
Troup------------------	---	---	---	---	0	---	None	Low	Moderate
AgB:									
Alaga------------------	---	---	---	---	0	---	None	Low	Moderate
AoB:									
Alaga------------------	---	---	---	---	0	---	None	Low	Moderate
Lucknow----------------	---	---	---	---	0	---	None	High	High
ApB, ApD:									
Alpin------------------	---	---	---	---	0	---	None	Low	High
AuB:									
Autryville-------------	---	---	---	---	0	---	None	Low	High
BaB:									
Barnwell---------------	---	---	---	---	0	---	None	Moderate	High
BbB2:									
Barnwell---------------	---	---	---	---	0	---	None	Moderate	High

Soil Features—Continued

Map symbol and soil name	Restrictive layer: Kind	Restrictive layer: Depth to top	Restrictive layer: Thickness	Restrictive layer: Hardness	Subsidence: Initial	Subsidence: Total	Potential for frost action	Risk of corrosion: Uncoated steel	Risk of corrosion: Concrete
		In	In		In	In			
BcC:									
Barnwell	---	---	---	---	0	---	None	Moderate	High
Cowarts	Cemented horizon	20-59	---	Very weakly cemented	0	---	None	Moderate	Moderate
Troup	---	---	---	---	0	---	None	Low	Moderate
BoB:									
Bonneau	---	---	---	---	0	---	None	Low	High
BuA:									
Butters	---	---	---	---	0	---	None	Low	Moderate
CaB:									
Candor	---	---	---	---	0	---	None	Low	High
CcA:									
Chastain	---	---	---	---	0	---	None	High	High
Chewacla	---	---	---	---	0	---	None	High	Moderate
ChA:									
Chewacla	---	---	---	---	0	---	None	High	Moderate
Chastain	---	---	---	---	0	---	None	High	High
CwD:									
Cowarts	Cemented horizon	20-59	---	Very weakly cemented	0	---	None	Moderate	Moderate
CxA:									
Coxville	---	---	---	---	0	---	None	High	High
DaA:									
Dorovan	---	---	---	---	4-12	51-60	None	High	High
DoA:									
Dothan	Plinthite	32-59	---	Moderately cemented	0	---	None	Moderate	Moderate
DoB:									
Dothan	Plinthite	25-57	---	Moderately cemented	0	---	None	Moderate	Moderate

Soil Features—Continued

Map symbol and soil name	Restrictive layer				Subsidence		Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Thickness	Hardness	Initial	Total		Uncoated steel	Concrete
		In	In		In	In			
DtB2:									
Dothan	Plinthite	25-57	---	Moderately cemented	0	---	None	Moderate	Moderate
EuA:									
Eunola	---	---	---	---	0	---	None	Low	High
FaA, FaB:									
Faceville	---	---	---	---	0	---	None	Low	Moderate
FbB2:									
Faceville	---	---	---	---	0	---	None	Low	Moderate
FoB:									
Foxworth	---	---	---	---	0	---	None	Low	Moderate
FuB:									
Fuquay	Plinthite	39-57	---	Moderately cemented	0	---	None	Low	High
GoA:									
Goldsboro	---	---	---	---	0	---	None	Moderate	High
JhA:									
Johns	Strongly contrasting textural stratification	33-39	---	Noncemented	0	---	None	Moderate	High
JoA:									
Johnston	---	---	---	---	0	---	None	High	High
JzA:									
Johnston	---	---	---	---	0	---	None	High	High
Mouzon	---	---	---	---	0	---	None	High	Moderate
KaA:									
Kalmia	Strongly contrasting textural stratification	22-39	---	Noncemented	0	---	None	Moderate	Moderate
LaB, LaD:									
Lakeland	---	---	---	---	0	---	None	Low	Moderate

Soil Features—Continued

Map symbol and soil name	Restrictive layer				Subsidence		Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Thickness	Hardness	Initial	Total		Uncoated steel	Concrete
		In	In		In	In			
LbB:									
Lucknow	---	---	---	---	0	---	None	High	High
LcB:									
Lucy	---	---	---	---	0	---	None	Low	High
LuA:									
Lumbee	Strongly contrasting textural stratification	26-38	---	Noncemented	0	---	None	High	High
LyA:									
Lynchburg	---	---	---	---	0	---	None	High	High
MaA, MaB:									
Marvyn	---	---	---	---	0	---	None	Moderate	High
MeA:									
Meggett	---	---	---	---	0	---	None	High	Moderate
MyA:									
Myatt	---	---	---	---	0	---	None	High	High
Paxville	---	---	---	---	0	---	None	High	High
NaB2:									
Nankin	---	---	---	---	0	---	None	High	High
NbC, NbD:									
Nankin	---	---	---	---	0	---	None	High	High
Lucy	---	---	---	---	0	---	None	Low	High
NeB:									
Noboco	---	---	---	---	0	---	None	Moderate	High
NmB2:									
Noboco	---	---	---	---	0	---	None	Moderate	High
NnA:									
Noboco	---	---	---	---	0	---	None	Moderate	High
Goldsboro	---	---	---	---	0	---	None	Moderate	High

Soil Features—Continued

Map symbol and soil name	Restrictive layer: Kind	Depth to top	Thickness	Hardness	Subsidence: Initial	Total	Potential for frost action	Risk of corrosion: Uncoated steel	Concrete
		In	In		In	In			
NoA, NoB:									
Norfolk	---	---	---	---	0	---	None	Moderate	High
OkA:									
Okeetee	---	---	---	---	0	---	None	High	High
OrA, OrB:									
Orangeburg	---	---	---	---	0	---	None	Moderate	Moderate
OsB2:									
Orangeburg	---	---	---	---	0	---	None	Moderate	Moderate
PaA:									
Paxville	---	---	---	---	0	---	None	High	High
PeA, PeB:									
Pelion	---	---	---	---	0	---	None	High	High
PtD:									
Pits	---	---	---	---	---	---	---	---	---
Udorthents	---	---	---	---	---	---	---	---	---
RaA:									
Rains	---	---	---	---	0	---	None	High	High
SmA:									
Smithboro	---	---	---	---	0	---	None	High	High
StA:									
State	---	---	---	---	0	---	None	Moderate	High
Eunola	---	---	---	---	0	---	None	Low	High
ThA, ThB:									
Thursa	---	---	---	---	0	---	None	Moderate	Moderate
TrB, TrC:									
Troup	---	---	---	---	0	---	None	Low	Moderate
UdD:									
Udorthents, refuse substratum	---	---	---	---	---	---	---	---	---
Pits	---	---	---	---	---	---	---	---	---

Soil Features—Continued

Map symbol and soil name	Restrictive layer				Subsidence		Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Thickness	Hardness	Initial	Total		Uncoated steel	Concrete
		In	In		In	In			
VaC:									
Vaucluse	Cemented horizon	15-45	---	Very weakly cemented	0	---	None	Low	High
WaB:									
Wagram	---	---	---	---	0	---	None	Low	High

Taxonomic Classification of the Soils

(An asterisk in the first column indicates a taxadjunct to the series. See text for a description of those characteristics that are outside the range of the series.)

Soil name	Family or higher taxonomic class
Ailey	Loamy, kaolinitic, thermic Arenic Kanhapludults
Alaga	Thermic, coated Typic Quartzipsamments
Alpin	Thermic, coated Lamellic Quartzipsamments
Autryville	Loamy, siliceous, subactive, thermic Arenic Paleudults
Barnwell	Fine-loamy, kaolinitic, thermic Typic Kanhapludults
Bonneau	Loamy, siliceous, subactive, thermic Arenic Paleudults
Butters	Coarse-loamy, siliceous, subactive, thermic Typic Paleudults
Candor	Sandy, siliceous, thermic Grossarenic Kandiudults
Chastain	Fine, mixed, semiactive, acid, thermic Fluvaquentic Endoaquepts
Chewacla	Fine-loamy, mixed, active, thermic Fluvaquentic Dystrudepts
Cowarts	Fine-loamy, kaolinitic, thermic Typic Kanhapludults
Coxville	Fine, kaolinitic, thermic Typic Paleaquults
Dorovan	Dysic, thermic Typic Haplosaprists
Dothan	Fine-loamy, kaolinitic, thermic Plinthic Kandiudults
Eunola	Fine-loamy, siliceous, semiactive, thermic Aquic Hapludults
Faceville	Fine, kaolinitic, thermic Typic Kandiudults
Foxworth	Thermic, coated Typic Quartzipsamments
Fuquay	Loamy, kaolinitic, thermic Arenic Plinthic Kandiudults
Goldsboro	Fine-loamy, siliceous, subactive, thermic Aquic Paleudults
Johns	Fine-loamy over sandy or sandy-skeletal, siliceous, semiactive, thermic Aquic Hapludults
Johnston	Coarse-loamy, siliceous, active, acid, thermic Cumulic Humaquepts
Kalmia	Fine-loamy over sandy or sandy-skeletal, siliceous, semiactive, thermic Typic Hapludults
Lakeland	Thermic, coated Typic Quartzipsamments
Lucknow	Loamy, kaolinitic, thermic Grossarenic Kandiudults
Lucy	Loamy, kaolinitic, thermic Arenic Kandiudults
Lumbee	Fine-loamy over sandy or sandy-skeletal, siliceous, subactive, thermic Typic Endoaquults
Lynchburg	Fine-loamy, siliceous, semiactive, thermic Aeric Paleaquults
Marvyn	Fine-loamy, kaolinitic, thermic Typic Kanhapludults
Meggett	Fine, mixed, active, thermic Typic Albaqualfs
Mouzon	Fine-loamy, siliceous, semiactive, thermic Typic Albaqualfs
Myatt	Fine-loamy, siliceous, active, thermic Typic Endoaquults
Nankin	Fine, kaolinitic, thermic Typic Kanhapludults
Noboco	Fine-loamy, siliceous, subactive, thermic Oxyaquic Paleudults
Norfolk	Fine-loamy, kaolinitic, thermic Typic Kandiudults
Okeetee	Fine, mixed, semiactive, thermic Aeric Albaqualfs
Orangeburg	Fine-loamy, kaolinitic, thermic Typic Kandiudults
Paxville	Fine-loamy, siliceous, semiactive, thermic Typic Umbraquults
Pelion	Fine-loamy, kaolinitic, thermic Aquic Kanhapludults
Pelion	Fine-loamy, kaolinitic, thermic Fragiaquic Kanhapludults
Rains	Fine-loamy, siliceous, semiactive, thermic Typic Paleaquults
Smithboro	Fine, kaolinitic, thermic Aeric Paleaquults
*State	Fine-loamy, siliceous, semiactive, thermic Typic Hapludults
Thursa	Fine-loamy, kaolinitic, thermic Typic Kandiudults
Troup	Loamy, kaolinitic, thermic Grossarenic Kandiudults
Udorthents	Typic Udorthents
Vaucluse	Fine-loamy, kaolinitic, thermic Fragic Kanhapludults
Wagram	Loamy, kaolinitic, thermic Arenic Kandiudults

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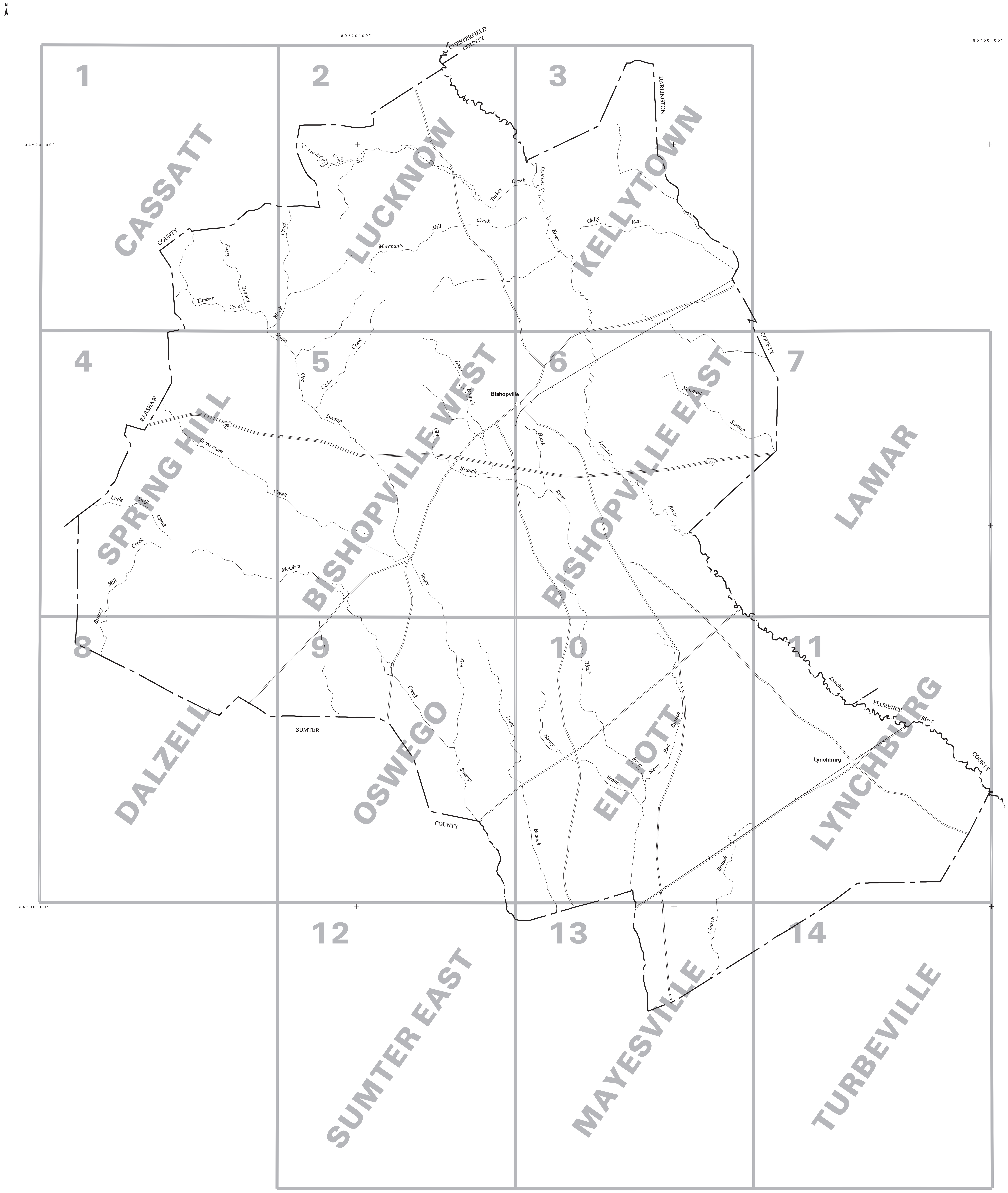

INDEX TO MAP SHEETS
LEE COUNTY, SOUTH CAROLINA

MILES
KILOMETERS
SCALE = 1:100000

SOIL LEGEND

SYMBOL	NAME
AaB	Ailey-Barnwell complex, 0 to 6 percent slopes
AcC	Ailey-Troup-Vaucluse complex, 6 to 10 percent slopes
AeD	Ailey-Vaucluse-Troup complex, 10 to 15 percent slopes
AgB	Alaga sand, 0 to 4 percent slopes
AoB	Alaga-Lucknow complex, 0 to 4 percent slopes, rarely flooded
ApB	Alpin sand, 0 to 6 percent slopes
ApD	Alpin sand, 6 to 15 percent slopes
AuB	Autryville sand, 0 to 4 percent slopes
BaB	Barnwell loamy coarse sand, 2 to 6 percent slopes
BbB2	Barnwell sandy loam, 2 to 6 percent slopes, moderately eroded
BcC	Barnwell-Cowarts-Troup complex, 6 to 10 percent slopes
BoB	Bonneau sand, 0 to 6 percent slopes
BuA	Butters coarse sand, 0 to 2 percent slopes
CaB	Candor sand, 0 to 6 percent slopes
CcA	Chastain-Chewacla complex, 0 to 2 percent slopes, frequently flooded
ChA	Chewacla-Chastain complex, 0 to 2 percent slopes, frequently flooded
CwD	Cowarts loamy sand, 10 to 15 percent slopes
CxA	Coxville sandy loam, 0 to 2 percent slopes
DaA	Dorovan silty clay loam, overwash, 0 to 2 percent slopes, frequently flooded
DoA	Dothan loamy sand, 0 to 2 percent slopes
DoB	Dothan loamy sand, 2 to 6 percent slopes
DtB2	Dothan sandy loam, 2 to 6 percent slopes, moderately eroded
EuA	Eunola sandy loam, 0 to 2 percent slopes, rarely flooded
FaA	Faceville loamy sand, 0 to 2 percent slopes
FaB	Faceville loamy sand, 2 to 6 percent slopes
FbB2	Faceville sandy loam, 2 to 6 percent slopes, moderately eroded
FoB	Foxworth sand, 0 to 4 percent slopes
FuB	Fuquay sand, 0 to 6 percent slopes
GoA	Goldsboro sandy loam, 0 to 2 percent slopes
JhA	Johns loamy sand, 0 to 2 percent slopes, rarely flooded
JoA	Johnston muck, 0 to 2 percent slopes, frequently flooded
JzA	Johnston-Mouzon complex, 0 to 2 percent slopes, frequently flooded
KaA	Kalmia loamy sand, wet substratum, 0 to 2 percent slopes, rarely flooded
LaB	Lakeland sand, 0 to 6 percent slopes
LaD	Lakeland sand, 6 to 15 percent slopes
LbB	Lucknow coarse sand, 0 to 4 percent slopes
LcB	Lucy sand, 0 to 6 percent slopes
LuA	Lumbee sandy loam, 0 to 2 percent slopes, rarely flooded
LyA	Lynchburg sandy loam, 0 to 2 percent slopes
MaA	Marvyn sand, 0 to 2 percent slopes
MaB	Marvyn sand, 2 to 6 percent slopes
MeA	Meggett sandy loam, 0 to 2 percent slopes, occasionally flooded
MyA	Myatt-Paxville complex, 0 to 2 percent slopes, occasionally flooded
NaB2	Nankin sandy clay loam, 2 to 6 percent slopes, moderately eroded
NbC	Nankin-Lucy complex, 6 to 10 percent slopes
NbD	Nankin-Lucy complex, 10 to 15 percent slopes
NeB	Noboco loamy sand, 2 to 6 percent slopes
NmB2	Noboco sandy loam, 2 to 6 percent slopes, moderately eroded
NnA	Noboco-Goldsboro complex, 0 to 2 percent slopes
NoA	Norfolk loamy sand, 0 to 2 percent slopes
NoB	Norfolk loamy sand, 2 to 6 percent slopes
OkA	Okeetee fine sandy loam, 0 to 2 percent slopes, rarely flooded
OrA	Orangeburg loamy sand, 0 to 2 percent slopes
OrB	Orangeburg loamy sand, 2 to 6 percent slopes
OsB2	Orangeburg sandy loam, 2 to 6 percent slopes, moderately eroded
PaA	Paxville coarse sandy loam, 0 to 2 percent slopes, occasionally flooded
PeA	Pelion loamy sand, 0 to 2 percent slopes
PeB	Pelion loamy sand, 2 to 6 percent slopes
PtD	Pits-Udorthents, loamy substratum complex, 0 to 15 percent slopes
RaA	Rains sandy loam, 0 to 2 percent slopes
SmA	Smithboro sandy loam, 0 to 2 percent slopes
StA	State-Eunola complex, 0 to 2 percent slopes, rarely flooded
ThA	Thursa loamy sand, 0 to 2 percent slopes
ThB	Thursa loamy sand, 2 to 6 percent slopes
TrB	Troup sand, 0 to 6 percent slopes
TrC	Troup sand, 6 to 10 percent slopes
UdD	Udorthents, refuse substratum-Pits complex, 0 to 15 percent slopes
VaC	Vaucluse loamy sand, 6 to 10 percent slopes
W	Water
WaB	Wagram sand, 0 to 4 percent slopes

CONVENTIONAL AND SPECIAL SYMBOLS LEGEND

CULTURAL FEATURES

BOUNDARIES

County or parish

Reservation (national forest or park, state forest or park)

Limit of soil survey (label) and/or denied access area

Field sheet matchline and neatline

ROAD EMBLEM & DESIGNATIONS

Interstate 173 79 345

Federal 287 410 224

State 173 52 347

LOCATED OBJECTS

Cemetery

HYDROGRAPHIC FEATURES

STREAMS

Unclassified

SPECIAL SYMBOLS FOR SOIL SURVEY AND SSURGO

SOIL DELINEATIONS AND SYMBOLS AaB BnB

Borrow pit ⌗

Perennial water

Short steep slope

Severely eroded spot

Wet spot

UNITED STATES
DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

LEE COUNTY, SOUTH CAROLINA
CASSATT QUADRANGLE
SHEET NUMBER 1 OF 14

SCALE 1:24000

MILES

FEET

KILOMETERS

NORTH

QUADRANGLE LOCATION

2 LUCKNOW
4 SPRING HILL
5 BISHOPVILLE WEST
INDEX TO ADJOINING 7.5 MAPS

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North American Datum of 1983 (NAD83). GRS-80 Spheroid 1000-meter ticks: Universal Transverse Mercator, zone 17. Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.

CASSATT, SOUTH CAROLINA
7.5 MINUTE SERIES
SHEET NUMBER 1 OF 14

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NORTH

QUADRANGLE LOCATION

SCALE 1:24000

MILES

FEET

KILOMETERS

INDEX TO ADJOINING 7.5 MAPS

1 CASSATT
3 KELLYTOWN
4 SPRING HILL
5 BISHOPVILLE WEST
6 BISHOPVILLE EAST

LUCKNOW, SOUTH CAROLINA

7.5 MINUTE SERIES
SHEET NUMBER 2 OF 14

Soil map delineations extending beyond the dashed white quadrangle neatline are for reference only and are included on adjacent map sheets.

80°15′00″ 80°12′30″ 80°10′00″ 80°07′30″

34°22′30″

34°20′00″ 34°17′30″ 34°15′00″

80°15′00″ 80°12′30″ 80°10′00″ 80°07′30″

Joins sheet 2, Lucknow

Joins sheet 5, Bishopville West

Joins sheet 6, Bishopville East

Joins sheet 7, Lamar

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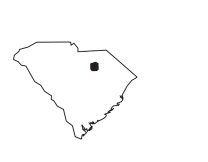
NORTH



QUADRANGLE LOCATION

SCALE 1:24000

MILES

FEET

KILOMETERS

2 LUCKNOW
5 BISHOPVILLE WEST
6 BISHOPVILLE EAST
7 LAMAR

INDEX TO ADJOINING 7.5 MAPS

KELLYTOWN, (OS) SOUTH CAROLINA
7.5 MINUTE SERIES
SHEET NUMBER 3 OF 14

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UNITED STATES
DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

LEE COUNTY, SOUTH CAROLINA
SPRING HILL QUADRANGLE
SHEET NUMBER 4 OF 14

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NORTH

QUADRANGLE LOCATION

SCALE 1:24000

MILES

FEET

KILOMETERS

1	2	1 CASSATT
	5	2 LUCKNOW
8	9	5 BISHOPVILLE WEST
		8 DALZELL
		9 OSWEGO

INDEX TO ADJOINING 7.5 MAPS

SPRING HILL, SOUTH CAROLINA
7.5 MINUTE SERIES
SHEET NUMBER 4 OF 14

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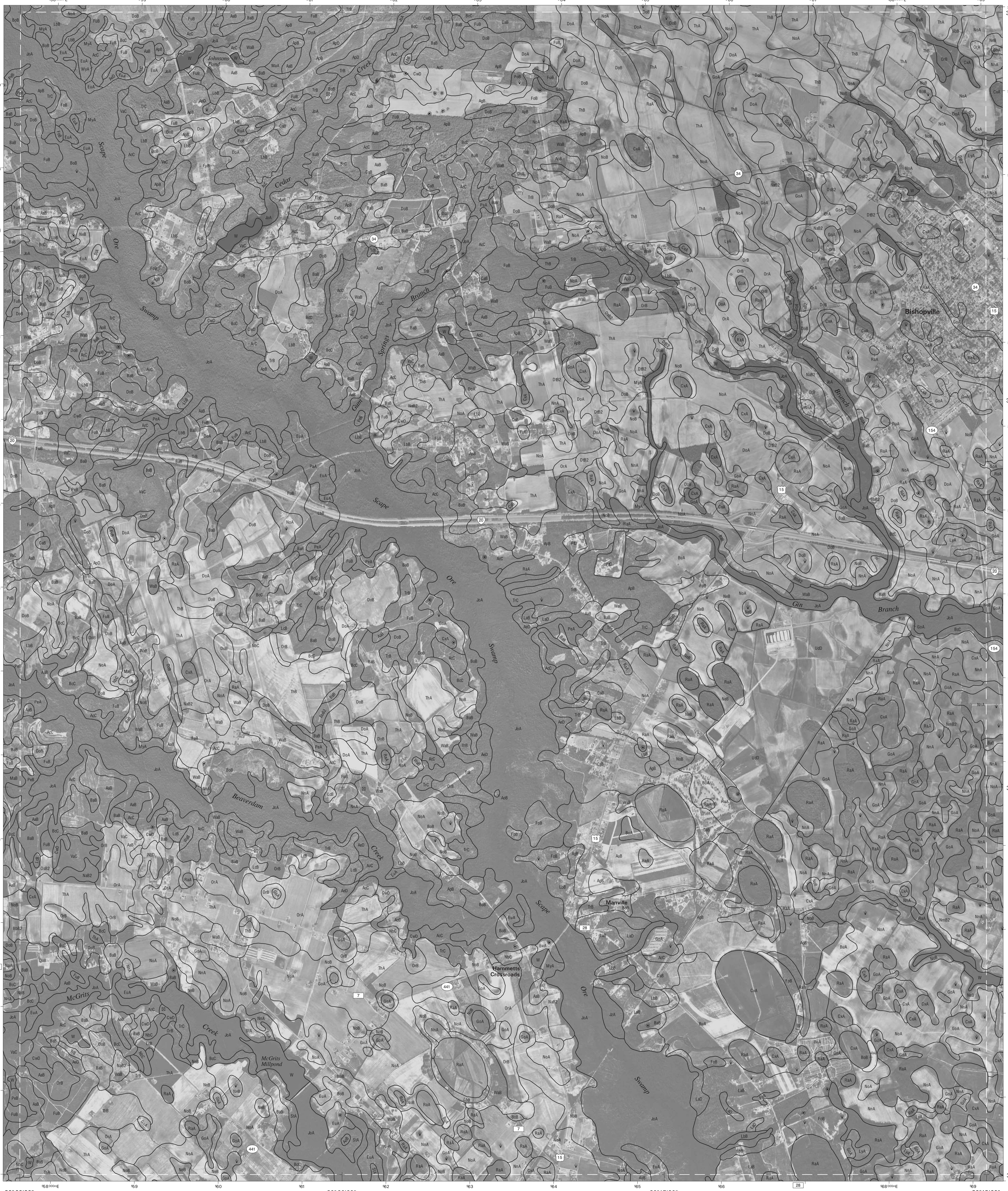
UNITED STATES
DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

LEE COUNTY, SOUTH CAROLINA
BISHOPVILLE WEST QUADRANGLE
SHEET NUMBER 5 OF 14



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NORTH

QUADRANGLE LOCATION

SCALE 1:24000

MILES

FEET

KILOMETERS

1	2	3
4		6
8	9	10

1 CASSATT
2 LUCKNOW
3 KELLYTOWN
4 SPRING HILL
6 BISHOPVILLE EAST
8 DALZELL
9 OSWEGO
10 ELLIOTT

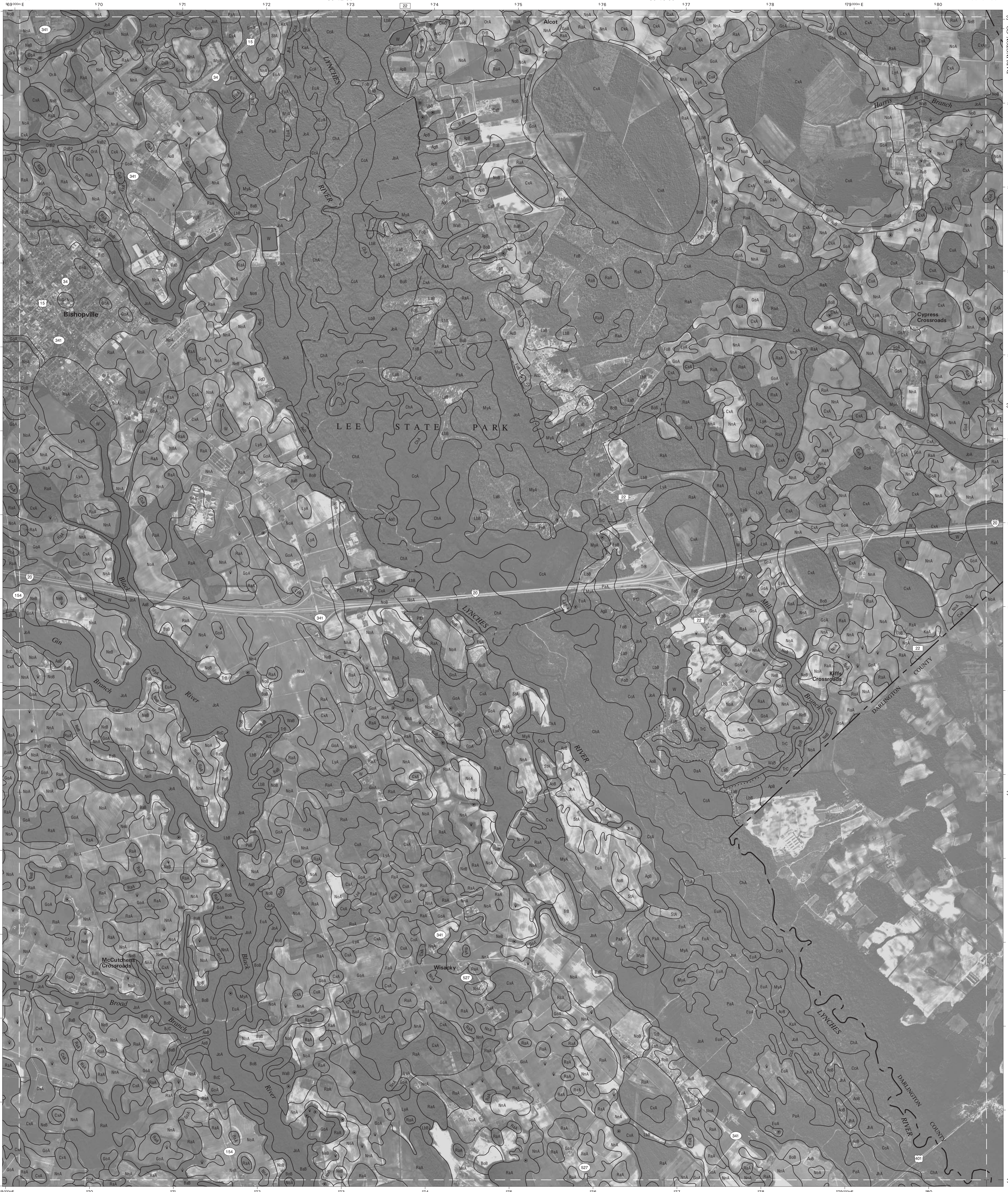
INDEX TO ADJOINING 7.5 MAPS

BISHOPVILLE WEST, SOUTH CAROLINA
7.5 MINUTE SERIES
SHEET NUMBER 5 OF 14

Soil map delineations extending beyond the dashed white quadrangle neatline are for reference only and are included on adjacent map sheets.

Joins sheet 2, Lucknow

Joins sheet 3, Kellytown



Joins sheet 5, Bishopville West

Joins sheet 7, Lamar

Joins sheet 9, Oswego

Joins sheet 10, Elliott

Joins sheet 11, Lynchburg

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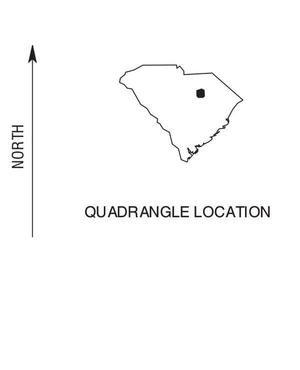

SCALE 1:24000

1 0 1
MILES

1000 0 1000 2000 3000 4000 5000 6000 7000
FEET

1 0 1
KILOMETERS

2	3	
5		7
9	10	11

2 LUCKNOW
3 KELLYTOWN
5 BISHOPVILLE WEST
7 LAMAR
9 OSWEGO
10 ELLIOTT
11 LYNCHBURG

INDEX TO ADJOINING 7.5 MAPS

BISHOPVILLE EAST, SOUTH CAROLINA

7.5 MINUTE SERIES
SHEET NUMBER 6 OF 14

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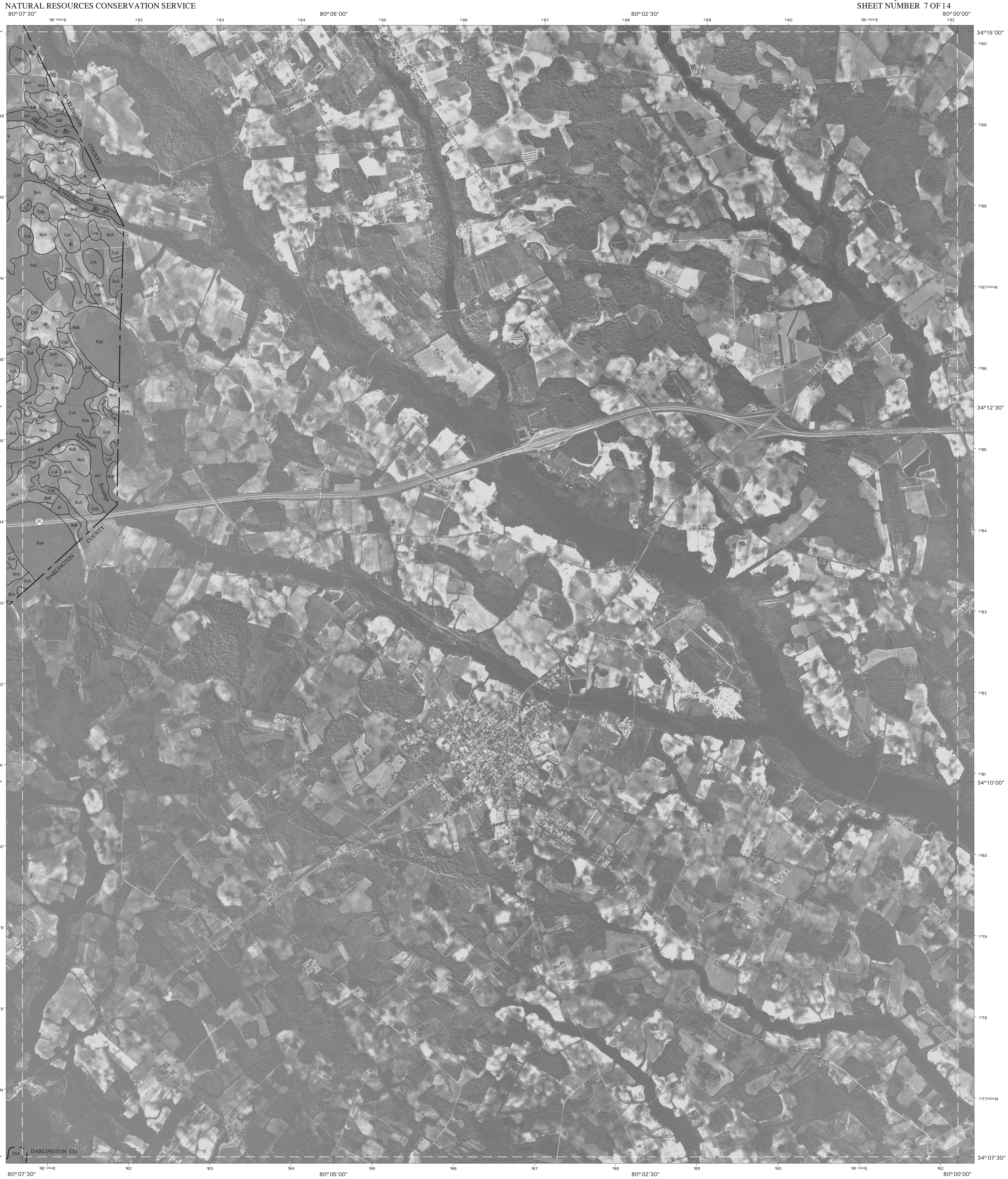
UNITED STATES
DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

LEE COUNTY, SOUTH CAROLINA
LAMAR QUADRANGLE
SHEET NUMBER 7 OF 14

Joins sheet 3, Kellytown



Joins sheet 6, Bishopville East

Joins sheet 11, Lynchburg

Joins sheet 10, Elliott

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NORTH

QUADRANGLE LOCATION

SCALE 1:24000

MILES

FEET

KILOMETERS

3		
6	■	
10	11	

3 KELLYTOWN
6 BISHOPVILLE EAST
10 ELLIOTT
11 LYNCHBURG

INDEX TO ADJOINING 7.5 MAPS

LAMAR, SOUTH CAROLINA

7.5 MINUTE SERIES
SHEET NUMBER 7 OF 14

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UNITED STATES
DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

LEE COUNTY, SOUTH CAROLINA
DALZELL QUADRANGLE
SHEET NUMBER 8 OF 14

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NORTH

QUADRANGLE LOCATION

SCALE 1:24000

MILES

FEET

KILOMETERS

4 SPRING HILL
5 BISHOPVILLE WEST
9 OSWEGO
12 SUMTER EAST

INDEX TO ADJOINING 7.5 MAPS

DALZELL, SOUTH CAROLINA

7.5 MINUTE SERIES
SHEET NUMBER 8 OF 14

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SCALE 1:24000

MILES

FEET

KILOMETERS

NORTH

QUADRANGLE LOCATION

INDEX TO ADJOINING 7.5 MAPS

4	5	6
8		10
	12	13

4 SPRING HILL
5 BISHOPVILLE WEST
6 BISHOPVILLE EAST
8 DALZELL
10 ELLIOTT
12 SUMTER EAST
13 MAYESVILLE

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OSWEGO, SOUTH CAROLINA
7.5 MINUTE SERIES
SHEET NUMBER 9 OF 14

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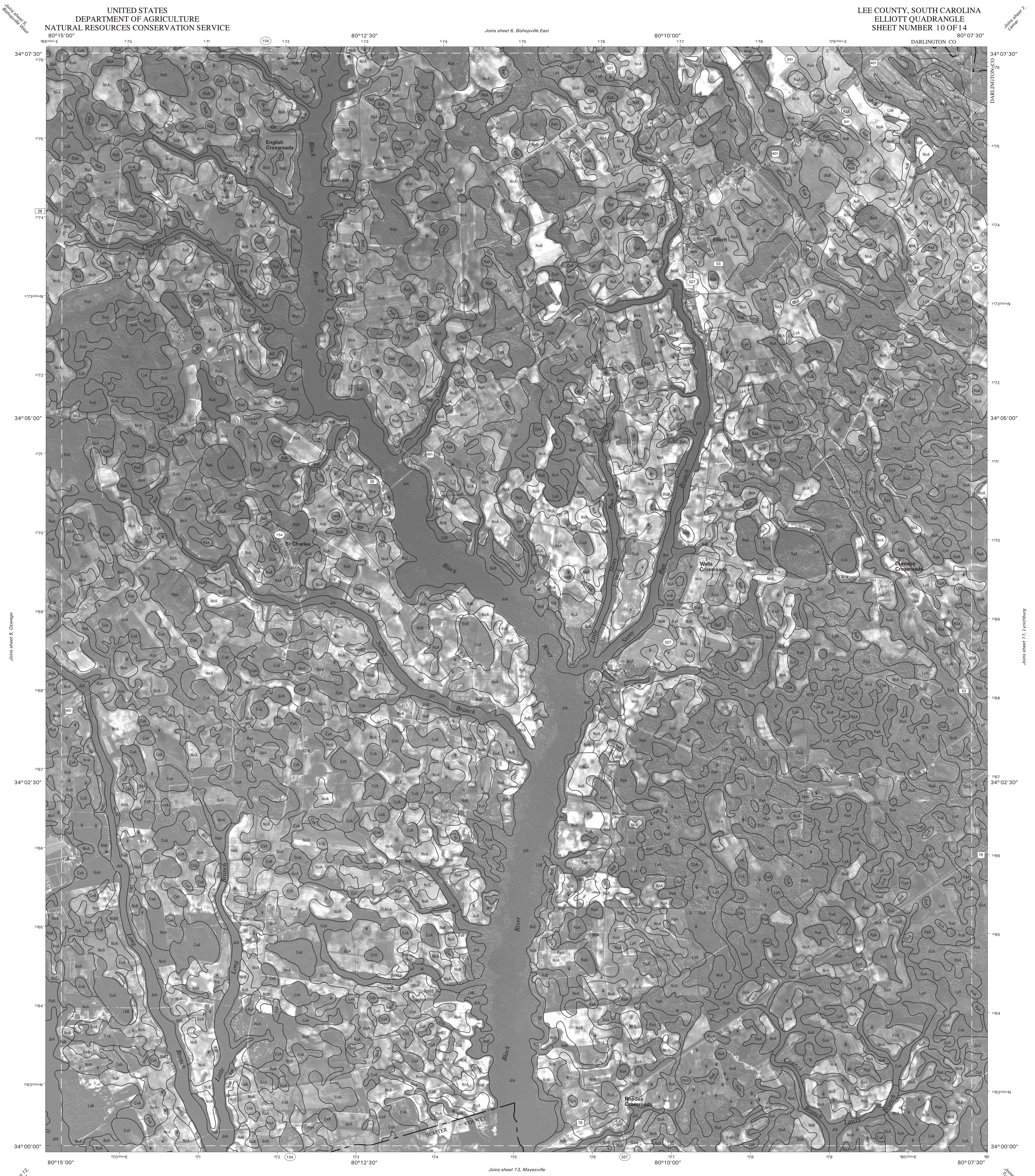
UNITED STATES
DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

LEE COUNTY, SOUTH CAROLINA
ELLIOTT QUADRANGLE
SHEET NUMBER 10 OF 14



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QUADRANGLE LOCATION

SCALE 1:24000

MILES

FEET

KILOMETERS

5	6	7
9		11
12	13	14

5 BISHOPVILLE WEST
6 BISHOPVILLE EAST
7 LAMAR
9 OSWEGO
11 LYNCHBURG
12 SUMTER EAST
13 MAYESVILLE
14 TURBEVILLE

INDEX TO ADJOINING 7.5 MAPS

ELLIOTT, SOUTH CAROLINA
7.5 MINUTE SERIES
SHEET NUMBER 10 OF 14

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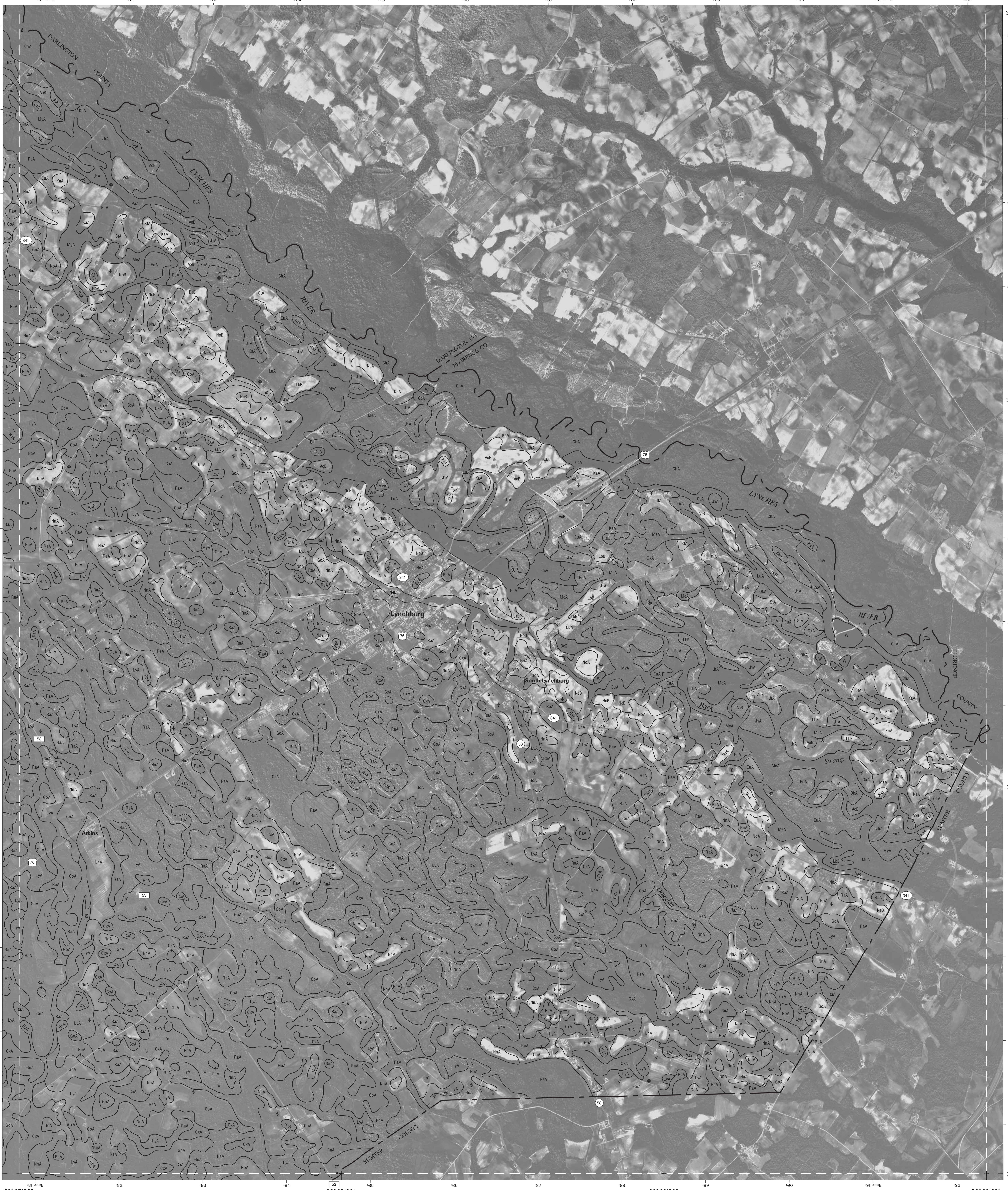
UNITED STATES
DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

LEE COUNTY, SOUTH CAROLINA
LYNCHBURG QUADRANGLE
SHEET NUMBER 11 OF 14

Joins sheet 6, Bishopville East

Joins sheet 7, Lamar



Joins sheet 10, Elliott

Joins sheet 13, Mayesville

Joins sheet 14, Turbeville

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NORTH

QUADRANGLE LOCATION

SCALE 1:24000

MILES

FEET

KILOMETERS

6	7	
10		
13	14	

6 BISHOPVILLE EAST
7 LAMAR
10 ELLIOTT
13 MAYESVILLE
14 TURBEVILLE

INDEX TO ADJOINING 7.5 MAPS

LYNCHBURG, SOUTH CAROLINA

7.5 MINUTE SERIES
SHEET NUMBER 11 OF 14

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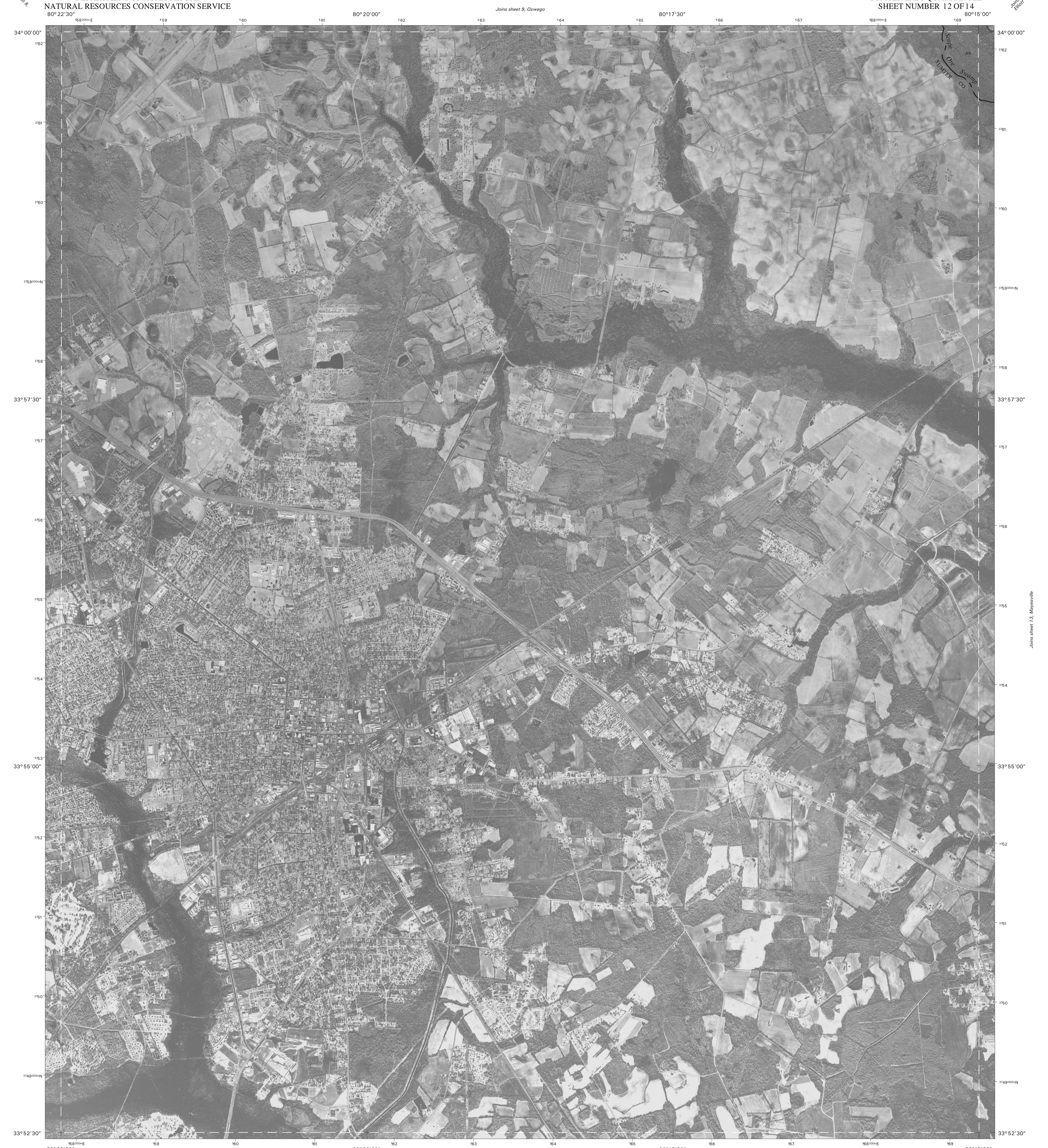
UNITED STATES
DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

LEE COUNTY, SOUTH CAROLINA
SUMTER EAST QUADRANGLE
SHEET NUMBER 12 OF 14



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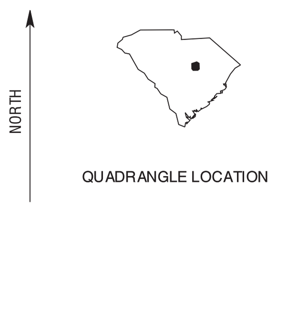

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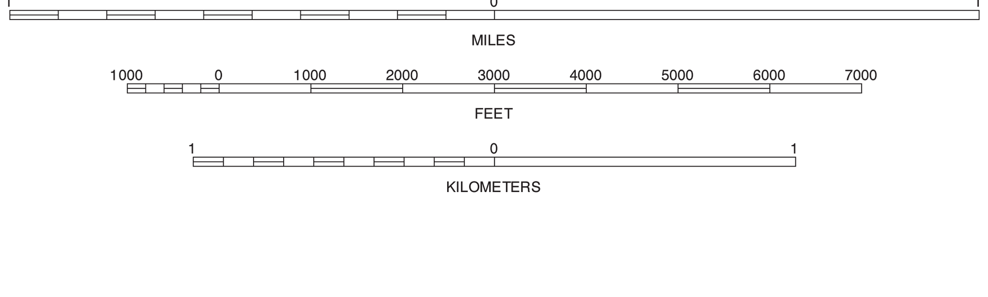

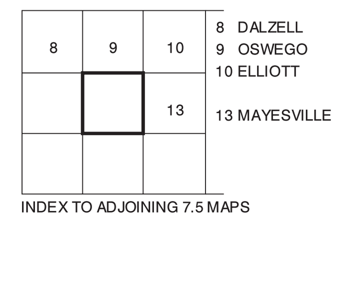

INDEX TO ADJOINING 7.5 MAPS

SUMTER EAST, SOUTH CAROLINA
7.5 MINUTE SERIES
SHEET NUMBER 12 OF 14

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UNITED STATES
DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

LEE COUNTY, SOUTH CAROLINA
MAYESVILLE QUADRANGLE
SHEET NUMBER 13 OF 14

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NORTH

QUADRANGLE LOCATION

SCALE 1:24000

MILES

FEET

KILOMETERS

9	10	11
12		14

9 OSWEGO
10 ELLIOTT
11 LYNCHBURG
12 SUMTER EAST
14 TURBEVILLE

INDEX TO ADJOINING 7.5 MAPS

MAYESVILLE, SOUTH CAROLINA
7.5 MINUTE SERIES
SHEET NUMBER 13 OF 14

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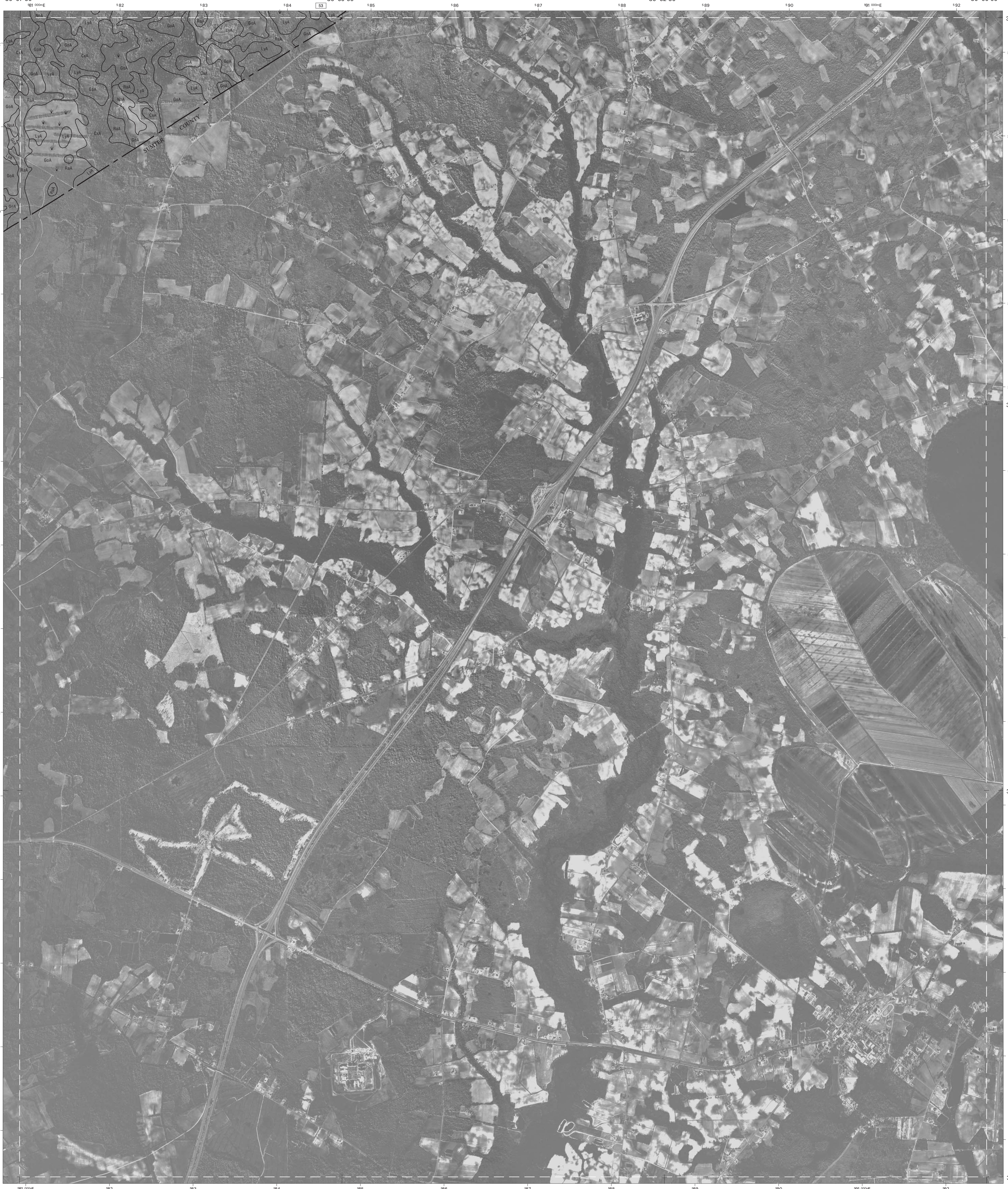
UNITED STATES
DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

LEE COUNTY, SOUTH CAROLINA
TURBEVILLE QUADRANGLE
SHEET NUMBER 14 OF 14

Joins sheet 10, Elliott

Joins sheet 11, Lynchburg

Joins sheet 13, Mayesville



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NORTH

QUADRANGLE LOCATION

SCALE 1:24000

MILES

FEET

KILOMETERS

10	11	
13		

10 ELLIOTT
11 LYNCHBURG
13 MAYESVILLE

INDEX TO ADJOINING 7.5 MAPS

TURBEVILLE, SOUTH CAROLINA
7.5 MINUTE SERIES
SHEET NUMBER 14 OF 14

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